CDX-GT65UIW

SERVICE MANUAL

US Model

Ver. 1.0 2011.07



- The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	CDX-GT650UI
Mechanism Type	MG-101PM-188
Optical Pick-up Name	DAX-25A

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

CEA2006 Standard
Power Output: 17 Watts RMS × 4 at 4 Ohms < 1% THD+N
SN Ratio: 80 dBA
(reference: 1 Watt into 4 Ohms)

Tuner section

FM

Tuning range: 87.5 – 107.9 MHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 150 kHz
Usable sensitivity: 10 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 70 dB (mono)
Separation: 40 dB at 1 kHz
Frequency response: 20 – 15,000 Hz

AM

Tuning range: 530 – 1,710 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 25 kHz
Sensitivity: 26 µV

CD Player section

Signal-to-noise ratio: 120 dB
Frequency response: 10 – 20,000 Hz
Wow and flutter: Below measurable limit

USB Player section

Interface: USB (Full-speed)
Maximum current: 500 mA

Power amplifier section

Output: Speaker outputs
Speaker impedance: 4 – 8 ohms
Maximum power output: 52 W × 4 (at 4 ohms)

General

Outputs:
Audio outputs terminal (front/rear)
Subwoofer output terminal (mono)
Power antenna (aerial) relay control terminal
Power amplifier control terminal
Inputs:
BUS control input terminal
BUS audio input terminal
Remote controller input terminal
Antenna (aerial) input terminal
Telephone ATT control terminal
AUX input jack (stereo mini jack)
USB signal input connector
Power requirements: 12 V DC car battery
(negative ground (earth))
Dimensions: Approx. 178 × 50 × 180 mm
($7\ ^1/_8 \times 2 \times 7\ ^1/_8$ in) (w/h/d)
Mounting dimensions: Approx. 182 × 53 × 162 mm
($7\ ^1/_4 \times 2\ ^1/_8 \times 6\ ^1/_2$ in) (w/h/d)
Mass: Approx. 1.3 kg (2 lb 14 oz)
Supplied accessories:
Card remote commander: RM-X151
Parts for installation and connections (1 set)

Your dealer may not handle some of the above listed accessories. Please ask the dealer for detailed information.

Design and specifications are subject to change without notice.

System requirements for using SensMe™

Computer

- CPU/RAM
  – IBM PC/AT compatible machine
  – CPU: Intel Pentium III Processor 450 MHz or higher
  – RAM: 256 MB or more (For Windows XP), 512 MB or more (For Windows Vista or later)
- USB port

OS

Windows XP, Windows Vista, Windows 7

For details on compatible editions or Service Pack, visit the following support site:
http://esupport.sony.com
http://www.sony.com/mobileAV

Monitor

High color (16-bit) or more, 800 × 600 dots or more

Other

Internet connection

Notes
- *The following system environments are not supported.*
  – *Non IBM PC type computers, such as Macintosh, etc.*
  – *Homemade computers*
  – *OS upgraded computers*
  – *Multi-display environment*
  – *Multi-boot environment*
  – *Virtual machine environment*
- *Depending on the computer condition, operation may not be possible even with the recommended environment.*

FM/AM COMPACT DISC PLAYER

9-893-248-01
2011G33-1

Sony Corporation
Published by Sony Techno Create Corporation

SONY®

For the State of California, USA only

Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate

Perchlorate Material: Lithium battery contains perchlorate

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The "SAT Radio Ready" logo indicates that this product will control a satellite radio tuner module (sold separately). Please see your nearest authorized Sony dealer for details on the satellite radio tuner module.
Please refer to the manuals included in the satellite radio tuner module. Sirius or XM Subscription required.
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CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

FLEXIBLE CIRCUIT BOARD REPAIRING

- Keep the temperature of soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION

The use of optical instruments with this product will increase eye hazard.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Accessories are given in the last of the electrical parts list.

SECTION 1
SERVICING NOTES

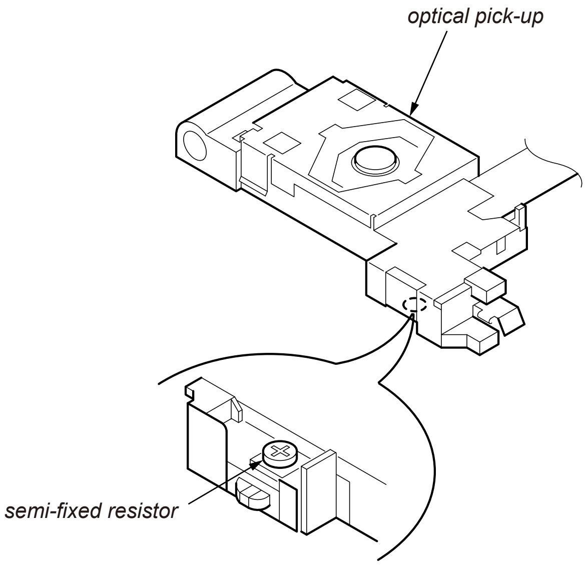
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

Never look into the laser diode emission from right above when checking it for adjustment. It is feared that you will lose your sight.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

TEST DISCS

Use following TEST DISC when this set confirms the operation and checks it.

Part No.	Description
3-702-101-01	YEDS-18 (for CD)
4-225-203-01	PATD-012 (for CD)

NOTE FOR THE 20-PIN CONNECTOR (CN901)

Do not use alcohol to clean the 20-pin connector (CN901) connecting the front panel with the main body.
Do not touch the connector directly with your bare hand. Poor contact may be caused.

NOTE FOR REPLACEMENT OF THE SERVO BOARD

When repairing, the complete SERVO board should be replaced since any parts in the SERVO board cannot be repaired.

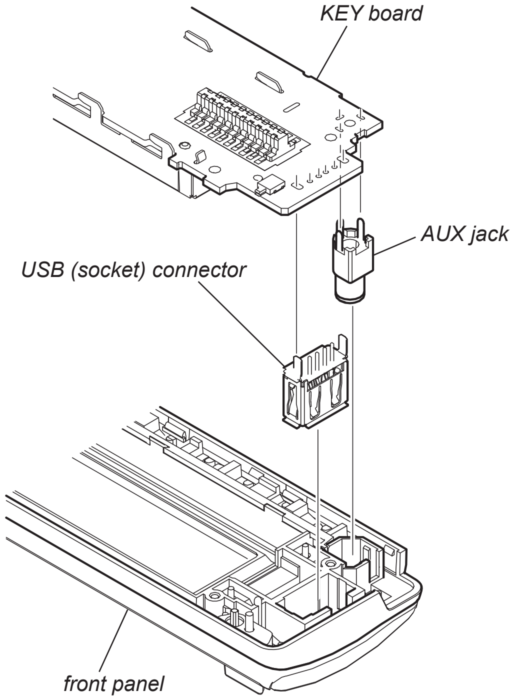
NOTE FOR REPLACEMENT OF THE SENSOR BOARD

When SENSOR board is defective, exchange the MECHANICAL BLOCK ASSY (P).

NOTE FOR REPLACEMENT OF THE USB CONNECTOR (CN971) AND THE AUX JACK (J901)

To replace the USB connector and the AUX jack requires alignment.

1. Insert the USB connector and the AUX jack into the front panel.
2. Place the KEY board on the front panel and align the terminals of the USB connector and the AUX jack with the holes in the KEY board.
3. Solder four terminals of the connector and three terminals of the jack.



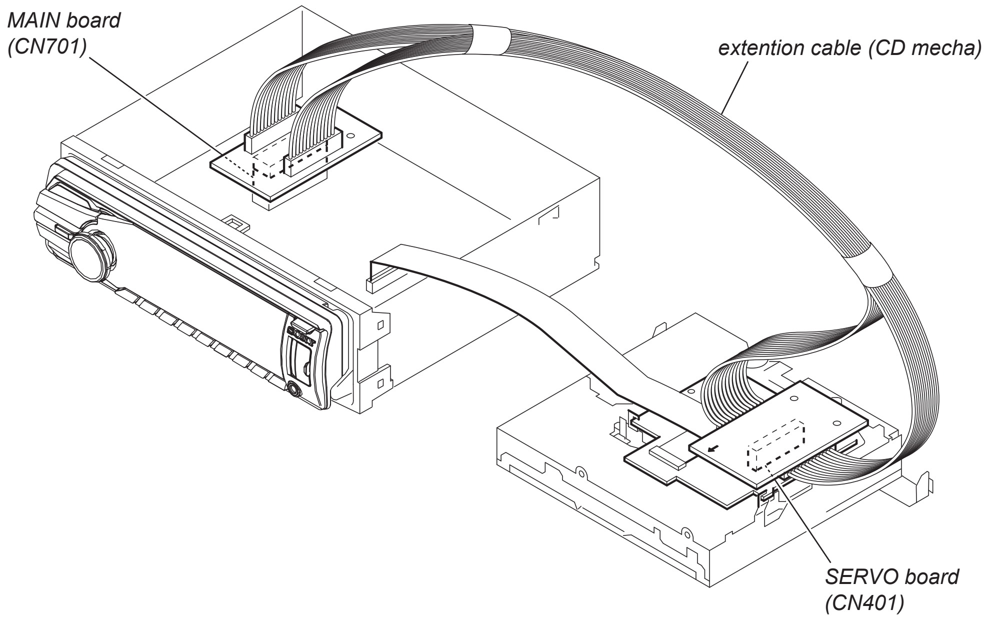
EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig cable (extension cable (CD mecha)) as shown below.

- Connect the MAIN board (CN701) and the SERVO board (CN401) with the jig cable.

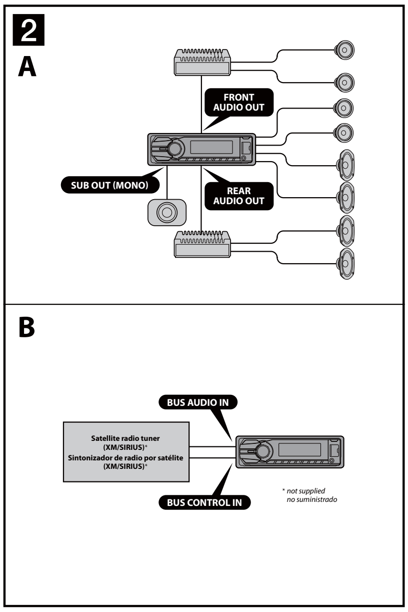
Jig cable:

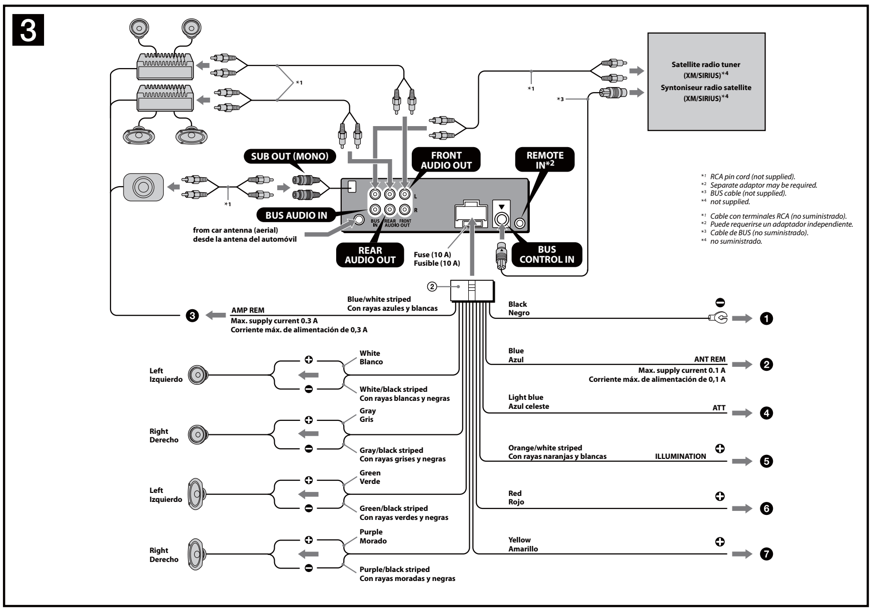
Part No.	Description
A-1818-424-A	EXTENSION CABLE (CD MECHA)



SECTION 2
GENERAL

This section is extracted from instruction manual.





Cautions

- This unit is designed for negative ground (earth) 12 V DC operation only.
- Do not get the leads under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power supply leads only after all other leads have been connected.
- **Run all ground (earth) leads to a common ground (earth) point.**
- Be sure to insulate any loose unconnected leads with electrical tape for safety.
- The use of optical instruments with this product will increase eye hazard.

Notes on the power supply lead (yellow)
- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Connection example 2

***Notes* (2-A)**
- *Be sure to connect the ground (earth) lead before connecting the amplifier.*
- *The alarm will only sound if the built-in amplifier is used.*

Note on satellite radio tuner (2-B)
This unit does not support the XM radio tuner XMDSON100.

Connection diagram 3

❶ **To a metal surface of the car**
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ **To the power antenna (aerial) control lead or power supply lead of antenna (aerial) booster**
Notes
- *It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).*
- *When your car has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❸ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ **To the interface cable of a car telephone**

❺ **To a car's illumination signal**
Be sure to connect the black ground (earth) lead to a metal surface of the car first.

❻ **To the +12 V power terminal which is energized in the accessory position of the ignition switch**
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  Be sure to connect the black ground (earth) lead to a metal surface of the car first.
- *When your car has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❼ **To the +12 V power terminal which is energized at all times**
Be sure to connect the black ground (earth) lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Precauciones

- Esta unidad ha sido diseñada para alimentarse sólo con cc de 12 V de masa negativa.
- No coloque los cables debajo de ningún tornillo, ni los aprisione con partes móviles (p. ej. los raíles del asiento).
- Antes de realizar las conexiones, apague el automóvil para evitar cortocircuitos.
- Conecte los cables de fuente de alimentación **amarillo** y **rojo** solamente después de haber conectado los demás.
- **Conecte todos los cables de conexión a masa a un punto común.**
- Por razones de seguridad, asegúrese de aislar con cinta aislante los cables sueltos que no estén conectados.

Notas sobre el cable de fuente de alimentación (amarillo)
- Cuando conecte esta unidad en combinación con otros componentes estéreo, la capacidad nominal del circuito conectado del automóvil debe ser superior a la suma del fusible de cada componente.
- Si no hay circuitos del automóvil con capacidad nominal suficientemente alta, conecte la unidad directamente a la batería.

Ejemplo de conexiones 2

***Notas* (2-A)**
- *Asegurese de conectar primero el cable de conexion a masa antes de realizar la conexion del amplificador.*
- *La alarma sonara unicamente si se utiliza el amplificador incorporado.*

Notas sobre el sintonizador de radio por satélite (2-B)
Esta unidad no es compatible con el sintonizador de radio XM XMDSON100.

Diagrama de conexión 3

❶ **A una superficie metálica del automóvil**
Conecte primero el cable de conexión a masa negro, y después los cables amarillo y rojo de fuente de alimentación.

❷ **Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de señal de la antena**
Notas
- *Si no se dispone de antena motorizada ni de amplificador de antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ **A AMP REMOTE IN de un amplificador de potencia opcional**
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ **Al cable de interfaz de un teléfono para automóvil**

❺ **A una señal de iluminación del automóvil**
Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.

❻ **Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de encendido**
Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

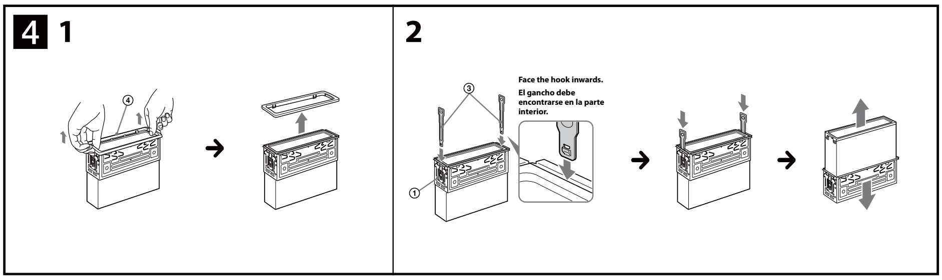
❼ **Al terminal de alimentación de +12 V que recibe energía sin interrupción**
Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.

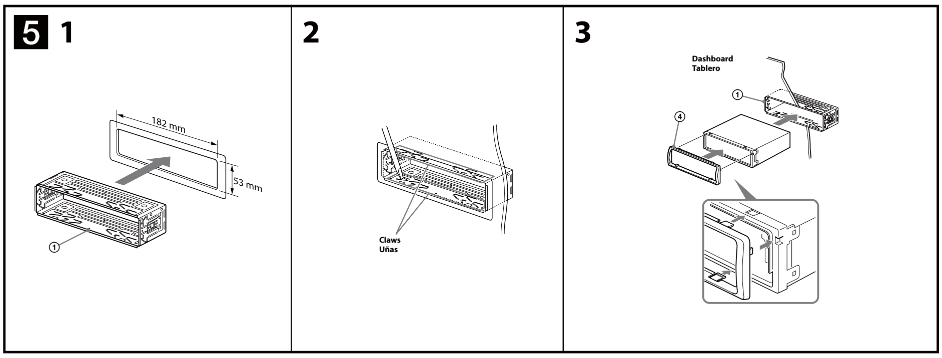
Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de + 12 V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal trasero o lateral, conecte el cable de control de antena motorizada (azul) o el cable de fuente de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener más información, consulte a su distribuidor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

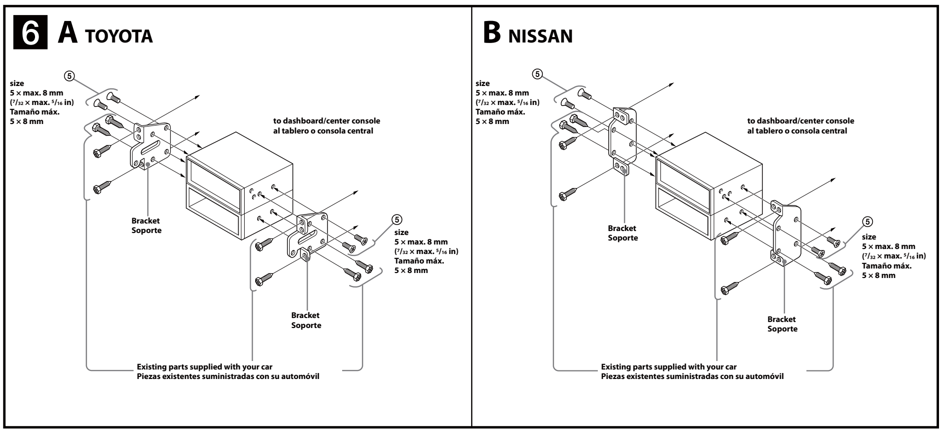
Conexión para protección de la memoria
Si conecta el cable de fuente de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, aunque apague el interruptor de encendido.

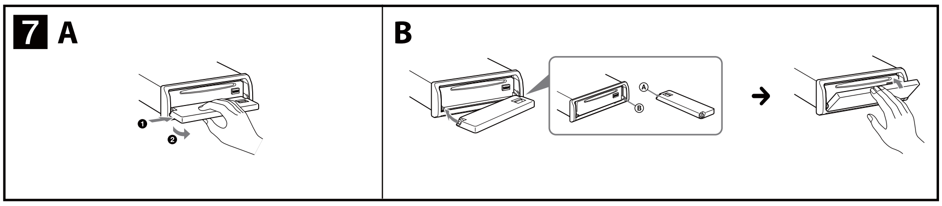
Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallas de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si la unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz y el amplificador no están conectados correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión de ambos dispositivos.









Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 45°.

Removing the protection collar and the bracket 4

Before installing the unit, remove the protection collar ④ and the bracket ① from the unit.

1 **Remove the protection collar ④.**
Pinch both edges of the protection collar ④, then pull it out.

2 **Remove the bracket ①.**
❶ Insert both release keys ③ together between the unit and the bracket ① until they click.
❷ Pull down the bracket ①, then pull up the unit to separate.

Mounting example 5

Installation in the dashboard

Notes
- *Bend these claws outward for a tight fit, if necessary (5-2).*
- *Make sure that the 4 catches on the protection collar ④ are properly engaged in the slots of the unit (5-3).*

Mounting the unit in a Japanese car 6

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

Note
To prevent malfunction, install only with the supplied screws ⑤.

How to detach and attach the front panel 7

Before installing the unit, detach the front panel.

7-A To detach

Before detaching the front panel, be sure to press and hold (SOURCE/OFF). Press (OPEN), then slide the front panel to the right, and gently pull out the left end of the front panel.

7-B To attach

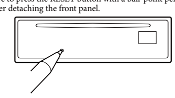
Place the hole Ⓐ of the front panel onto the spindle Ⓑ on the unit, then lightly push the left side in.

Warning if your car's ignition has no ACC position

Be sure to set the Auto Off function. For details, see the supplied Operating Instructions.
The unit will shut off completely and automatically in the set time after the unit is turned off, which prevents battery drain.
If you do not set the Auto Off function, press and hold (SOURCE/OFF) until the display disappears each time you turn the ignition off.

RESET button

When the installation and connections are completed, be sure to press the RESET button with a ball-point pen, etc., after detaching the front panel.



Precauciones

- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera con las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a polvo, suciedad, vibraciones excesivas o altas temperaturas como, por ejemplo, a la luz solar directa o cerca de conductos de calefacción.
- Para realizar una instalación segura y firme, utilice solamente elementos de instalación suministrados.

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 45°.

Extracción del marco de protección y del soporte 4

Antes de instalar la unidad, retire el marco de protección ④ y el soporte ① de esta.

1 **Retire el marco de protección ④.**
Apriete ambos bordes del marco de protección ④ y, a continuación, tire de él hacia fuera.

2 **Retire el soporte ①.**
❶ Inserte ambas llaves de liberación ③ entre la unidad y el soporte ① hasta que encajen.
❷ Presione el soporte ① y, a continuación, levante la unidad para separar ambos elementos.

Ejemplo de montaje 5

Instalación en el tablero

Notas
- *Si es necesario, doble las uñas hacia fuera para que encaje firmemente (5-2).*
- *Compruebe que los 4 enganches del marco de protección ④ estén bien fijados en las ranuras de la unidad (5-3).*

Montaje de la unidad en un automóvil japonés 6

Es posible que no pueda instalar esta unidad en algunos automóviles japoneses. En tal caso, consulte a su distribuidor Sony.

Nota
Para evitar que se produzcan fallas de funcionamiento, realice la instalación solamente con los tornillos suministrados ⑤.

Forma de extraer e instalar el panel frontal 7

Antes de instalar la unidad, extraiga el panel frontal.

7-A Para extraerlo

Antes de extraer el panel frontal, asegúrese de mantener presionado (SOURCE/OFF). Presione (OPEN) y, a continuación, deslice el panel frontal hacia la derecha y tire suavemente de su extremo izquierdo.

7-B Para instalarlo

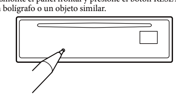
Coloque el orificio Ⓐ del panel frontal en el eje Ⓑ de la unidad y, a continuación, presione ligeramente el lado izquierdo hacia adentro.

Advertencia: si el encendido del automóvil no dispone de una posición ACC

Asegúrese de ajustar la función de desconexión automática. Para obtener más información, consulte el manual de instrucciones suministrado.
La unidad se apagará completa y automáticamente en el tiempo establecido después de que se desconecte la unidad, lo que evita que se desgaste la batería.
Si no ha ajustado la función de desconexión automática, mantenga presionado (SOURCE/OFF) cada vez que apague el interruptor de encendido, hasta que la pantalla desaparezca.

Botón RESET

Una vez finalizada la instalación y las conexiones, desmonte el panel frontal y presione el botón RESET con un bolígrafo o un objeto similar.



Notas acerca de la sintonización
- Si se sustituye la batería del vehículo, se cambian las conexiones o se restablece la unidad, se eliminará el ajuste de sintonización.
- Para obtener información sobre cómo ajustar la sintonización, consulte el manual de instrucciones suministrado.

SECTION 3 DISASSEMBLY

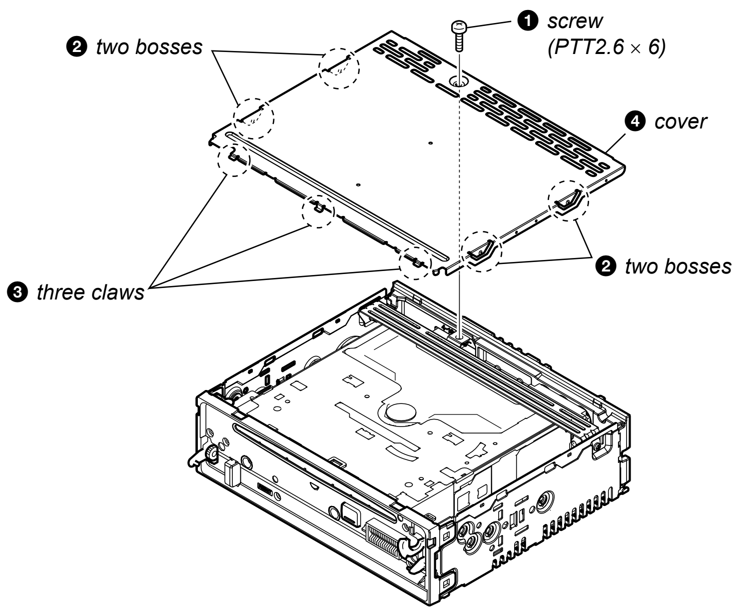
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

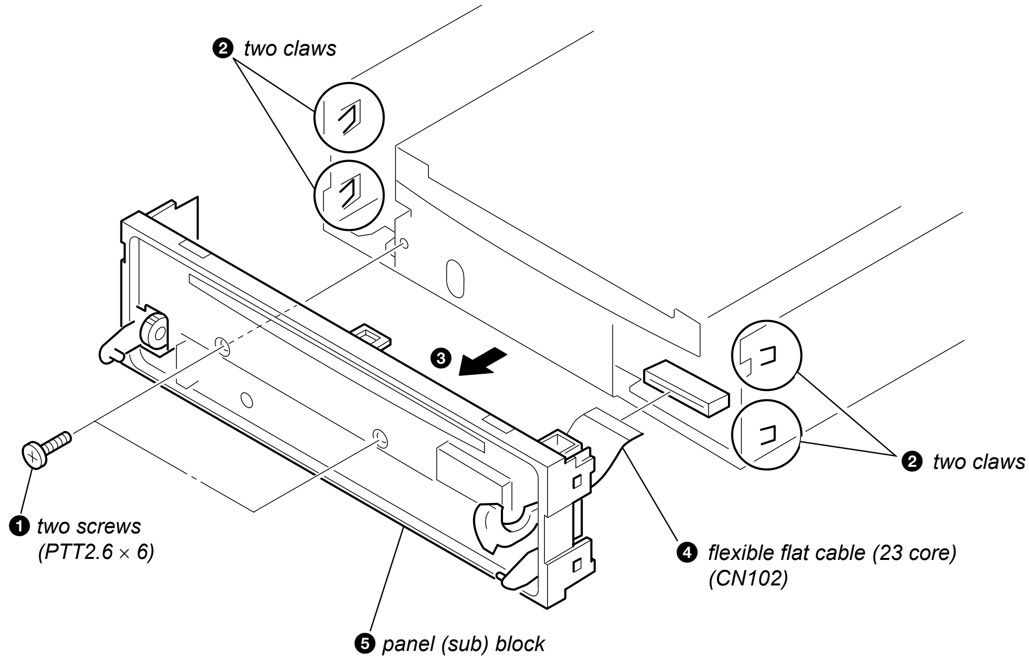
- SET
- FRONT PANEL SECTION
  Note: Illustration of disassembly is omitted.
- 3-2. COVER (Page 7)
- 3-3. PANEL (SUB) BLOCK (Page 8)
- 3-4. CD MECHANISM DECK (MG-101PM-188) (Page 8)
  - 3-5. MAIN BOARD (Page 9)
  - 3-6. SERVO BOARD (Page 9)
    - 3-7. CHASSIS (T) SUB ASSY (Page 10)
    - 3-8. ROLLER ARM ASSY (Page 10)
    - 3-9. CHASSIS (OP) ASSY (Page 11)
    - 3-10. CHUCKING ARM SUB ASSY (Page 11)
    - 3-11. SLED MOTOR ASSY (Page 12)
    - 3-12. OPTICAL PICK-UP SECTION (Page 13)
    - 3-13. OPTICAL PICK-UP (Page 13)

Note: Follow the disassembly procedure in the numerical order given.

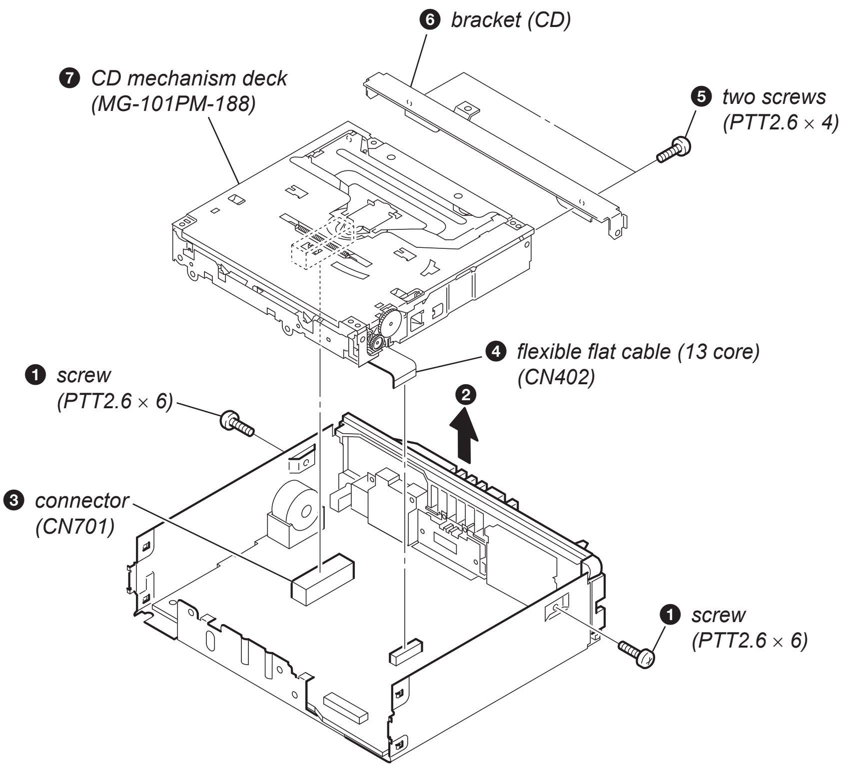
3-2. COVER



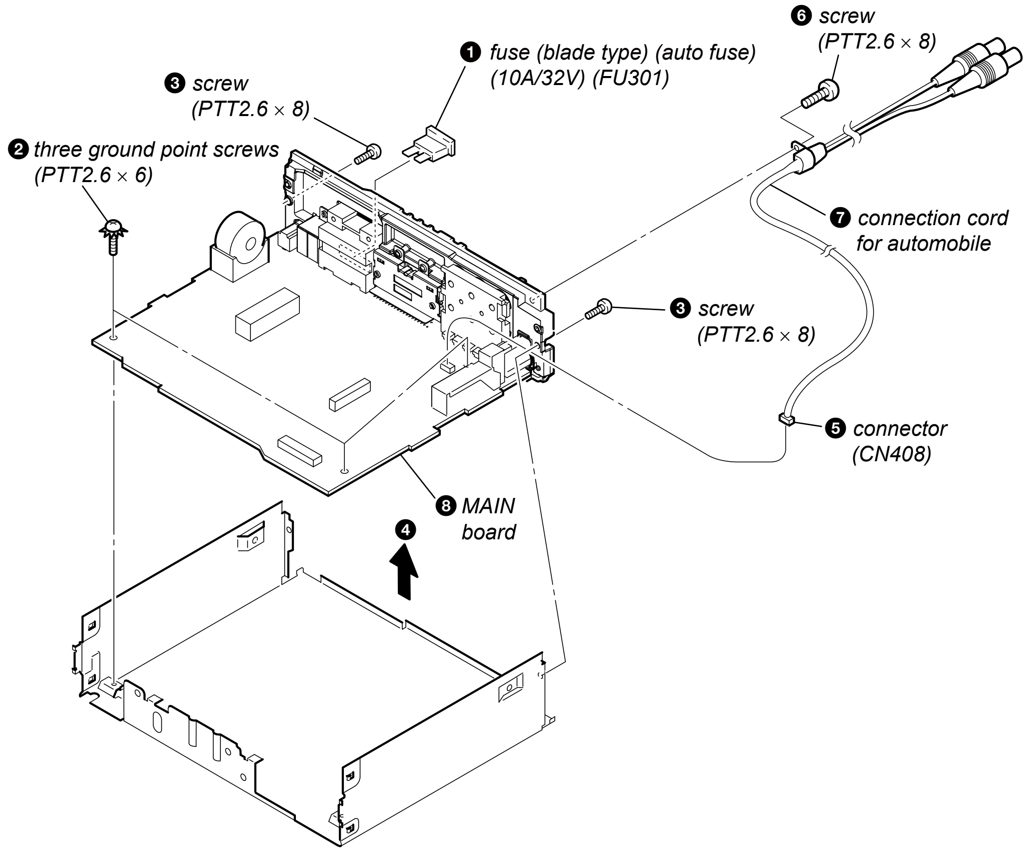
3-3. PANEL (SUB) BLOCK



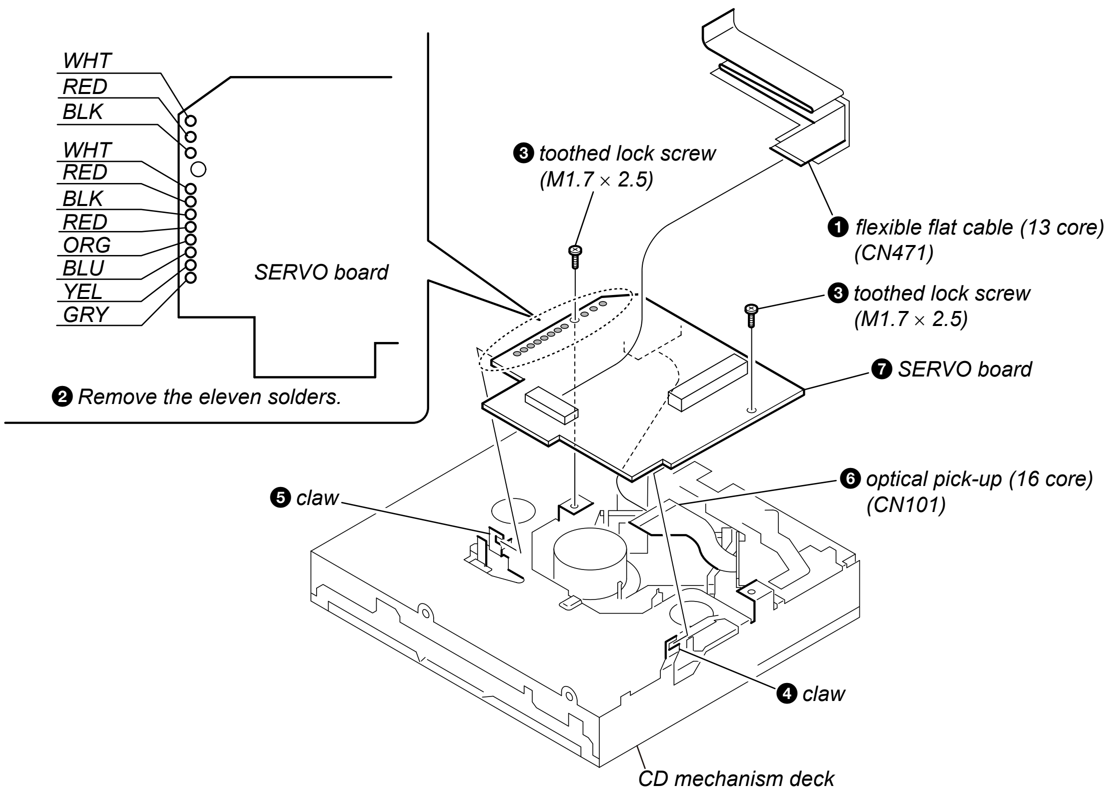
3-4. CD MECHANISM DECK (MG-101PM-188)



3-5. MAIN BOARD

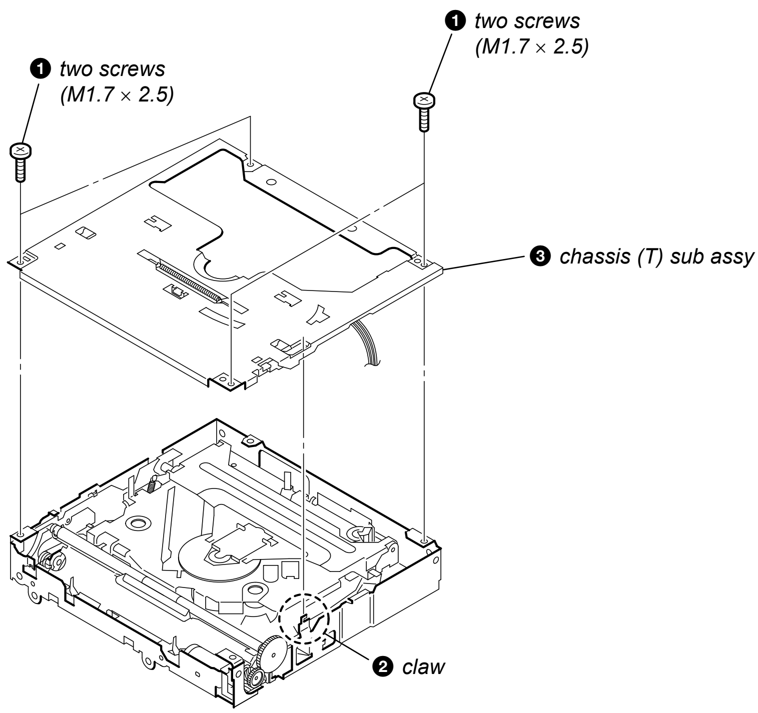


3-6. SERVO BOARD

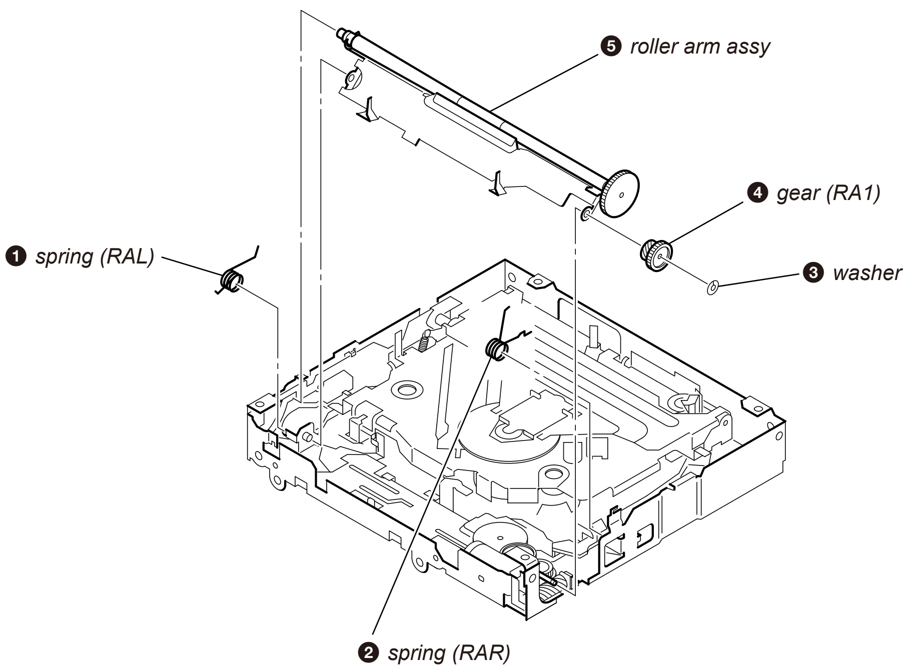


– bottom side view –

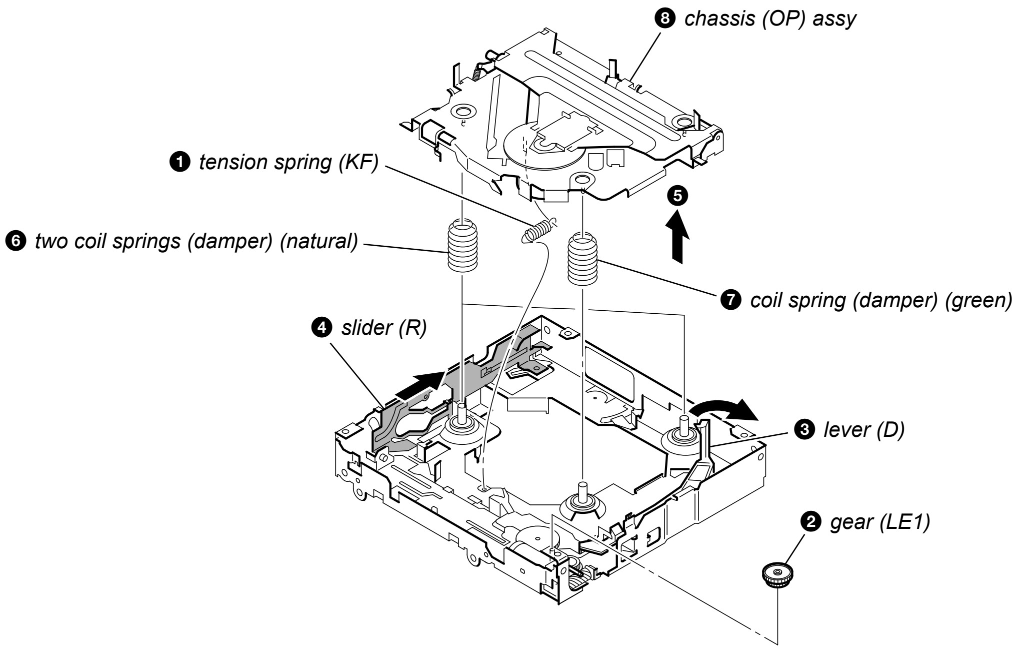
3-7. CHASSIS (T) SUB ASSY



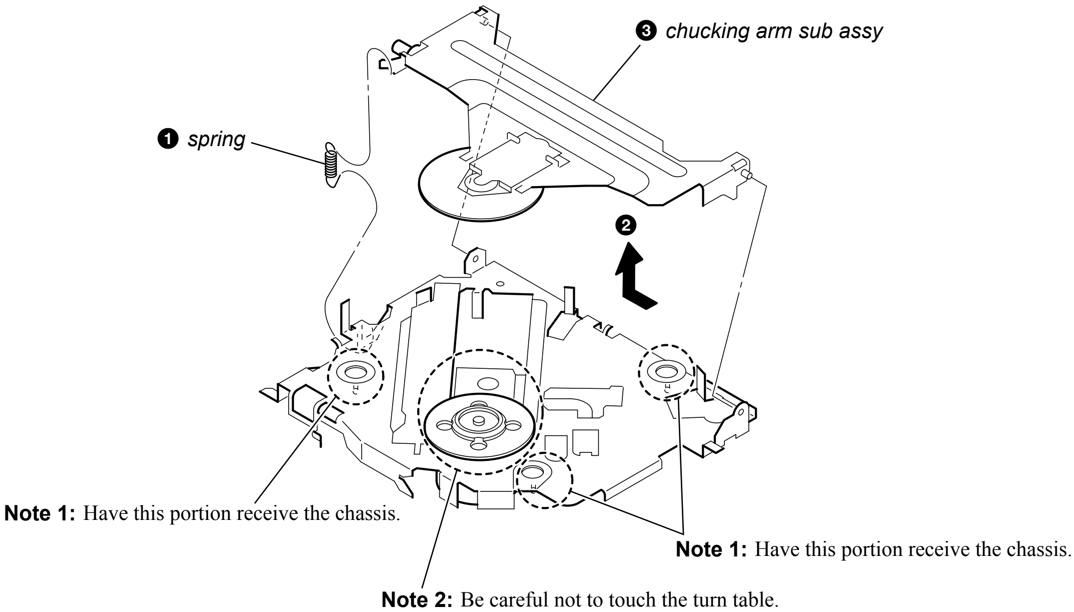
3-8. ROLLER ARM ASSY



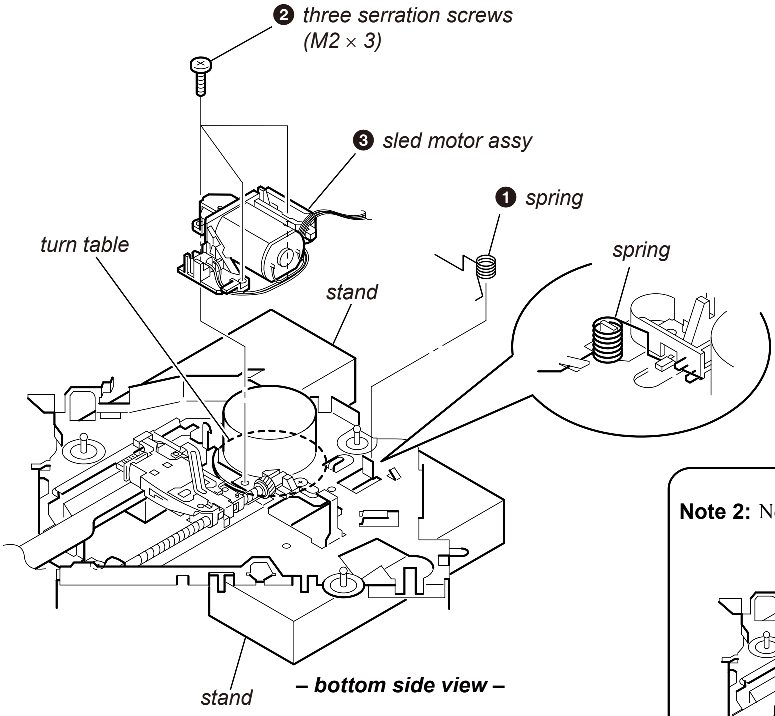
3-9. CHASSIS (OP) ASSY



3-10. CHUCKING ARM SUB ASSY

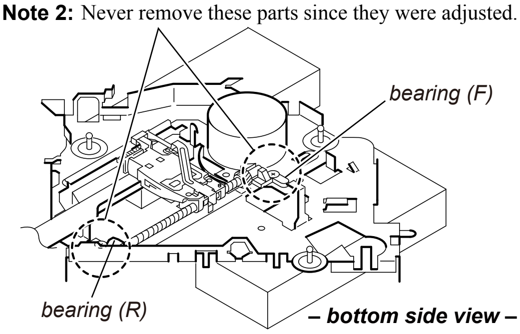


3-11. SLED MOTOR ASSY

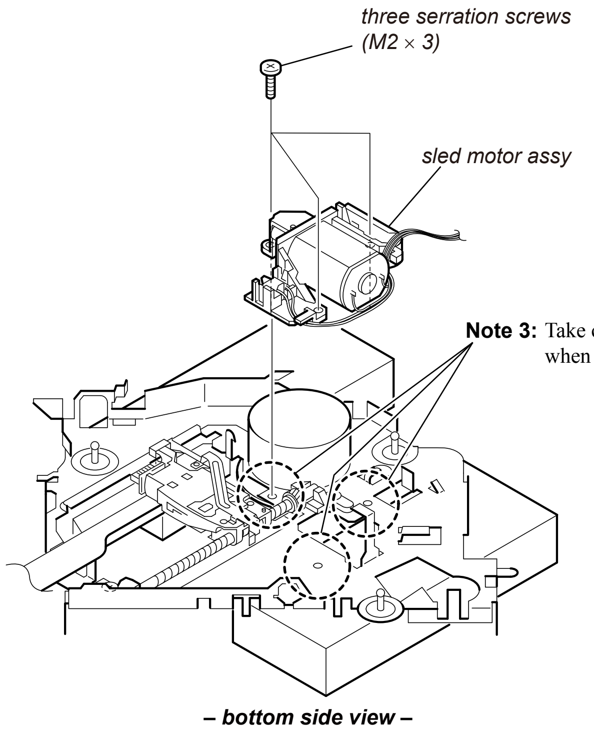


Note 1: Place the stand with care not to touch the turn table.

Note 2: Never remove these parts since they were adjusted.

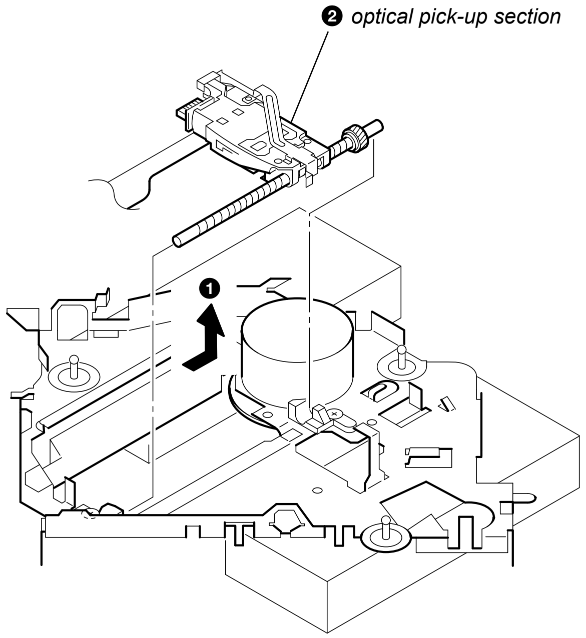


• Note for Assembly

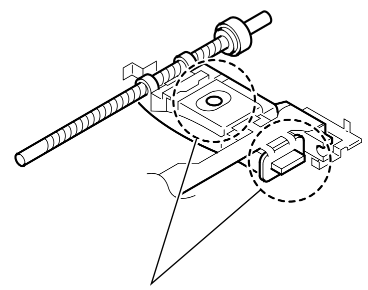


Note 3: Take care to prevent the chassis from being bent when tightening the three machine screws.

3-12. OPTICAL PICK-UP SECTION

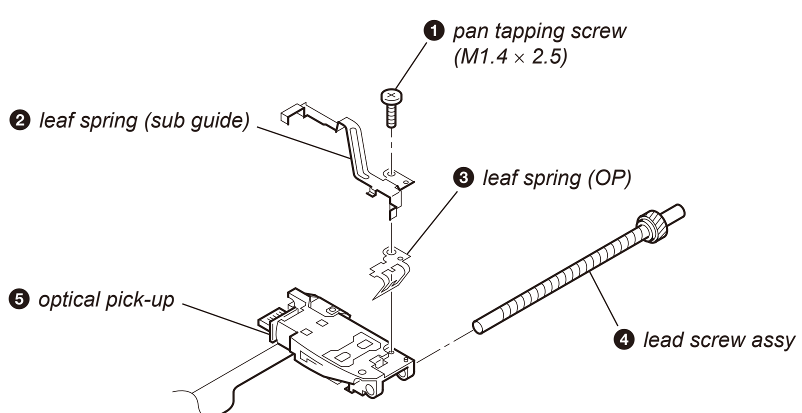


– bottom side view –



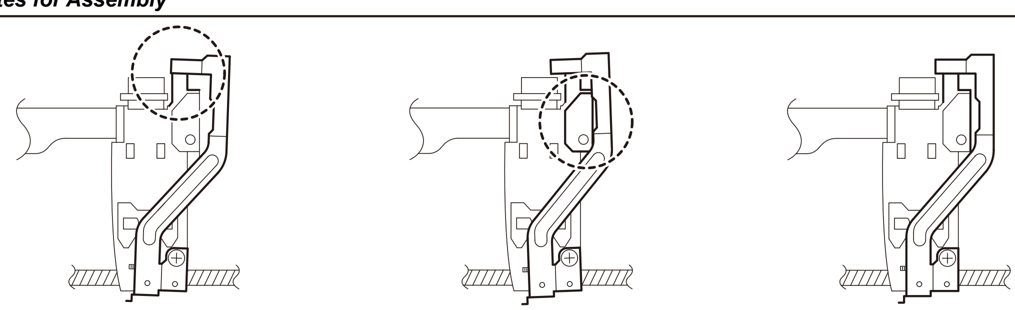
Note: Be careful not to touch the lens and hologram terminal when removing the optical pick-up section.

3-13. OPTICAL PICK-UP



– bottom side view –

• Notes for Assembly



Prevent the end of the leaf spring (sub guide) from being in contact with the OP slide base.

Prevent the end of the leaf spring (sub guide) from being in contact with the OP slide base.

There is space at the end of the leaf spring (sub guide) to avoid contact with the slide.

SECTION 4
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.

Note:
- : Parts extracted from the component side.
- : Parts extracted from the conductor side.
- : Indicates side identified with part number.
- △ : Internal component.
- : Pattern from the side which enables seeing.
  (The other layers' patterns are not indicated.)

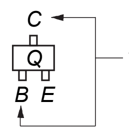
Caution:

Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

Caution:

Pattern face side: (SIDE B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.



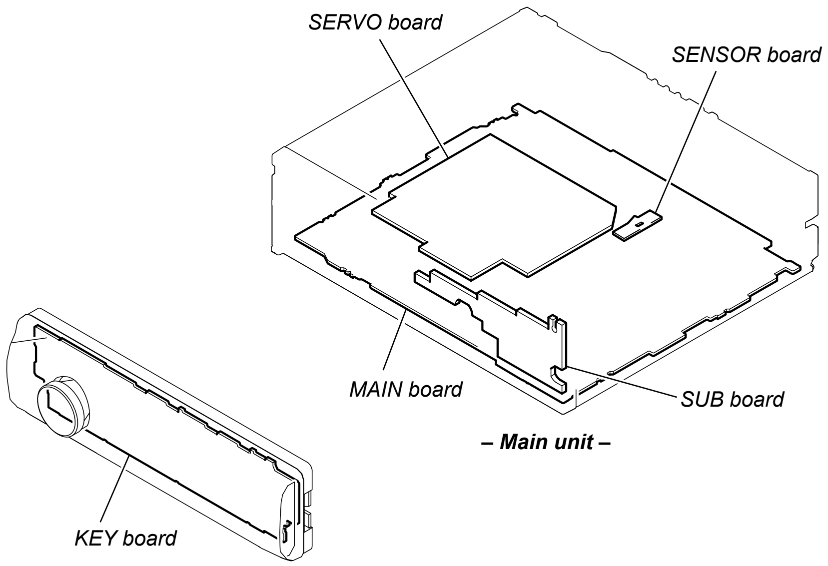
For Schematic Diagrams.

Note:
- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : Internal component.
- : Panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- : B+ Line.
- Power voltages is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ): AM
  < >: CD PLAY
  ∗ : Impossible to measure
- Voltages are taken with VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : FM
  : AM
  : CD PLAY
  : USB
  : AUX IN
  : BUS AUDIO IN

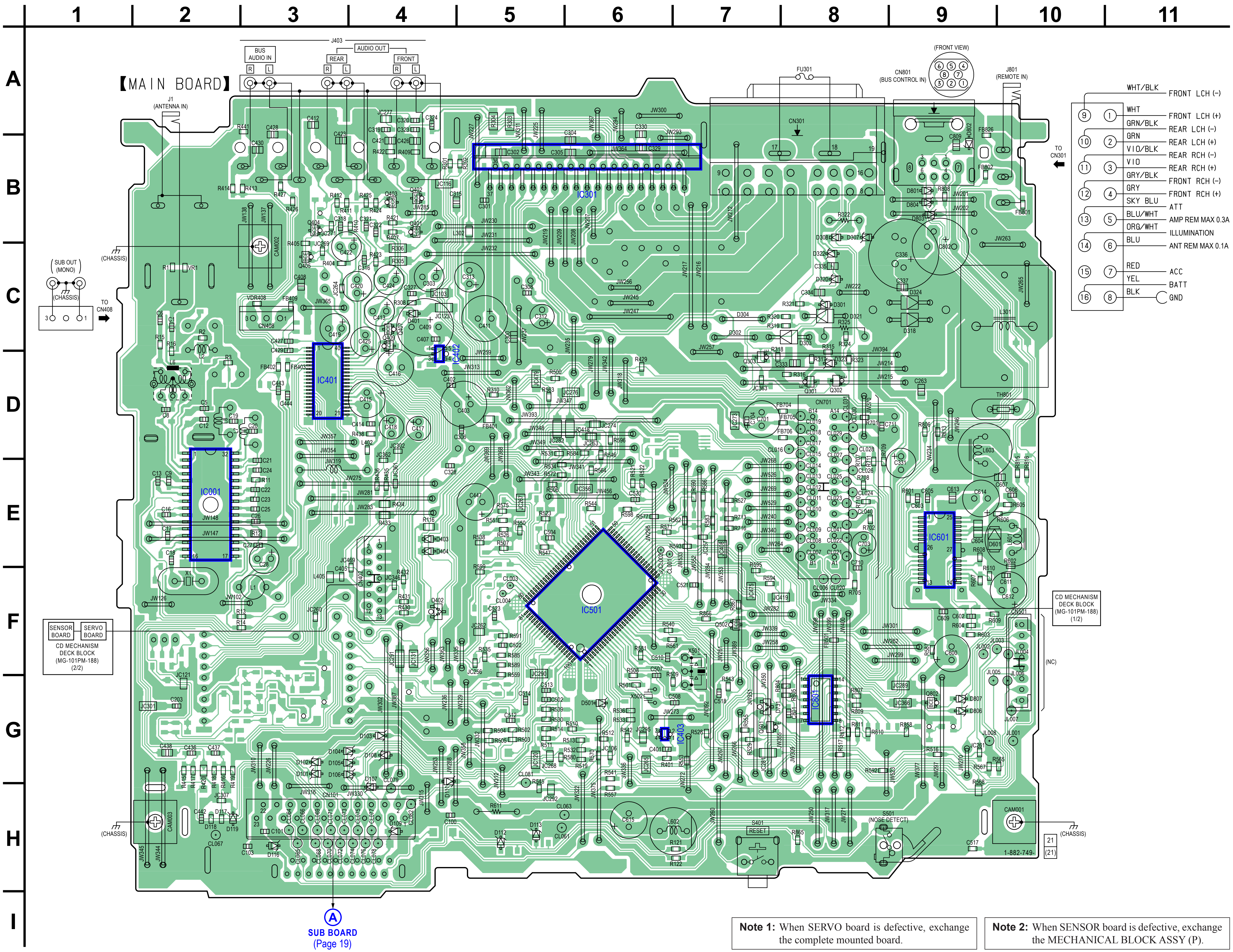
- **Circuit Boards Location**



– Main unit –

– Front panel –

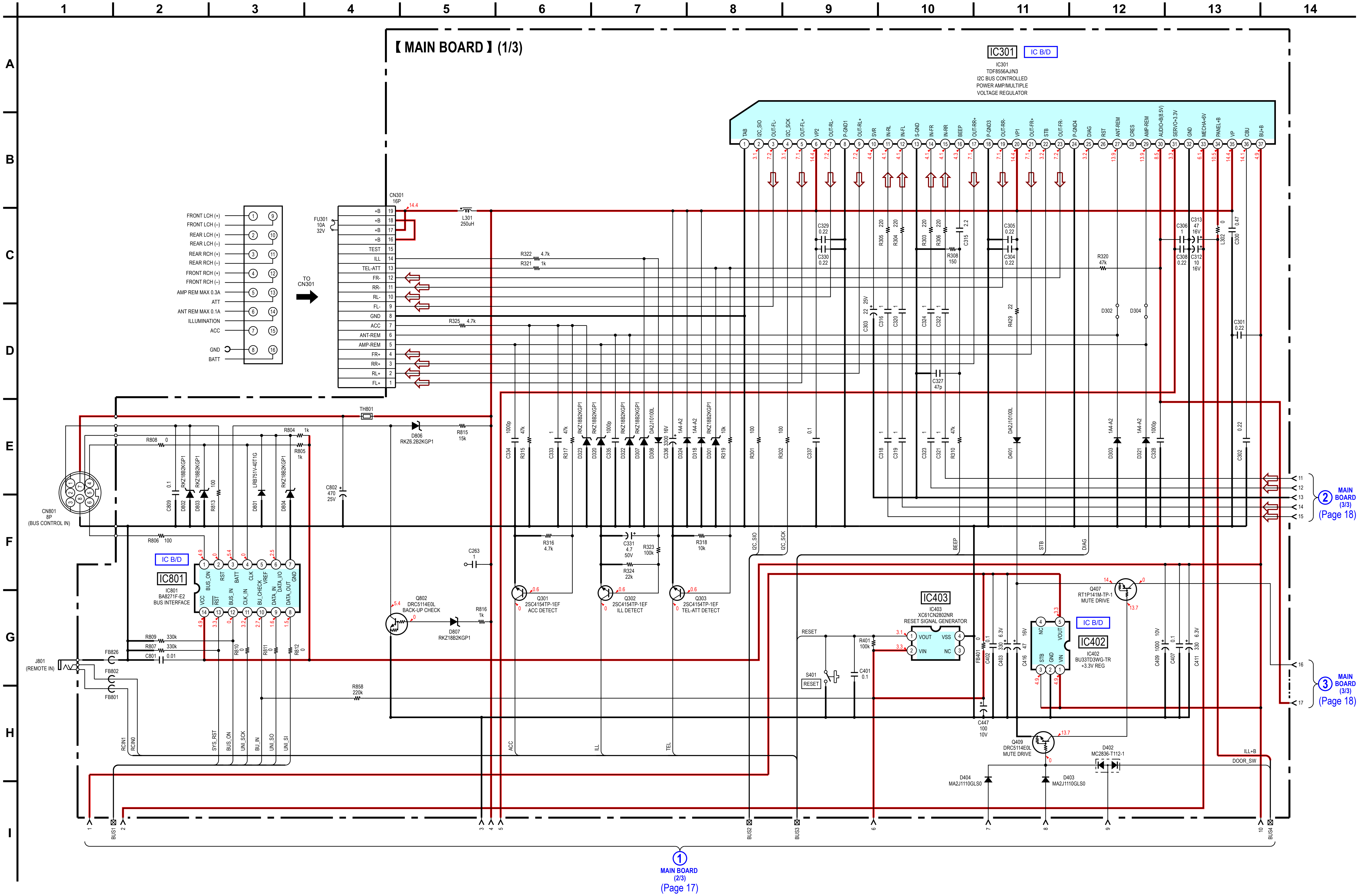
4-1. PRINTED WIRING BOARDS - MAIN Section - • See page 14 for Circuit Boards Location. • : Uses unleaded solder.



Note 1: When SERVO board is defective, exchange the complete mounted board.

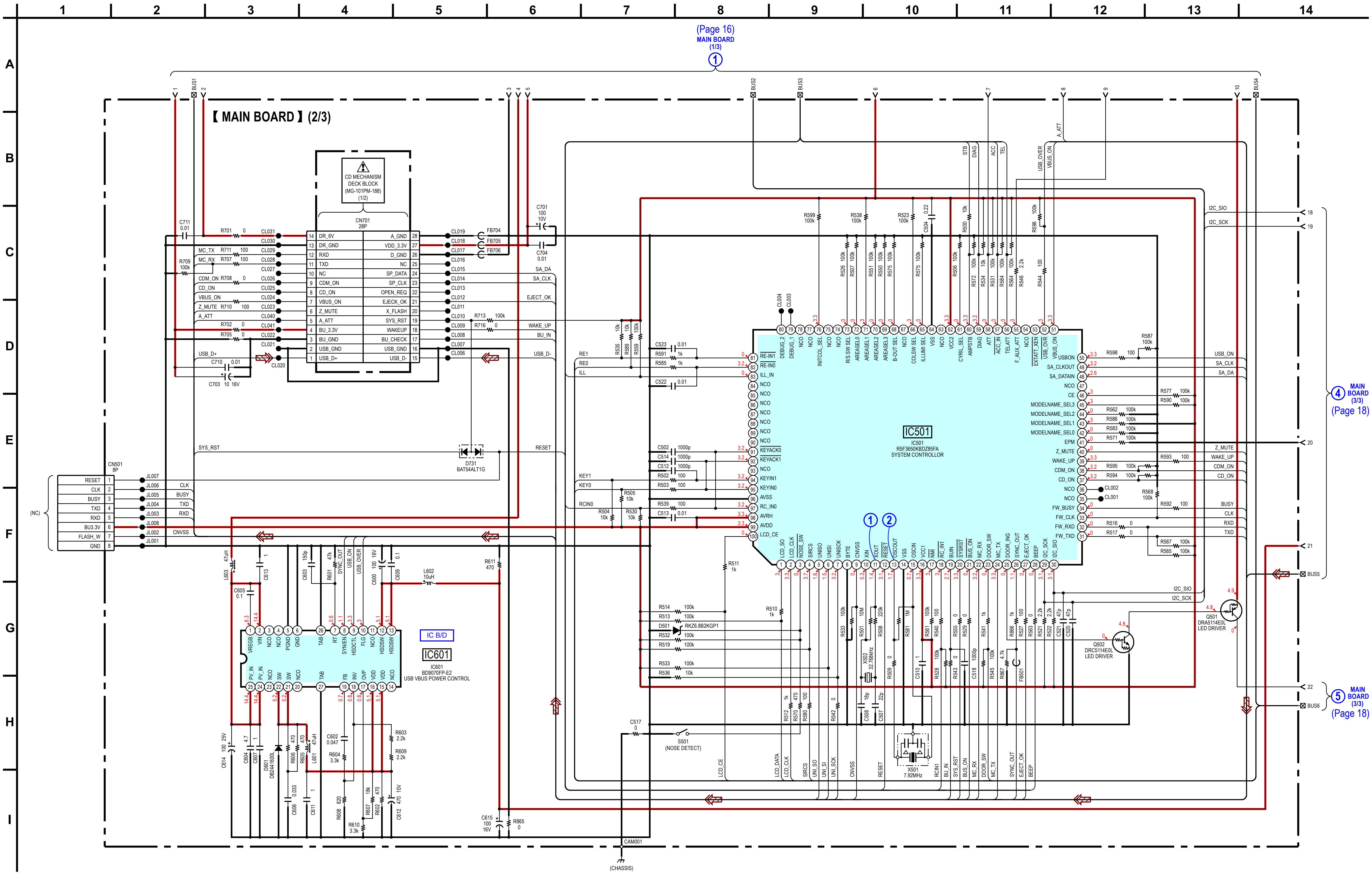
Note 2: When SENSOR board is defective, exchange the MECHANICAL BLOCK ASSY (P).

4-2. SCHEMATIC DIAGRAM - MAIN Section (1/3) - • See page 22 for IC Block Diagrams.

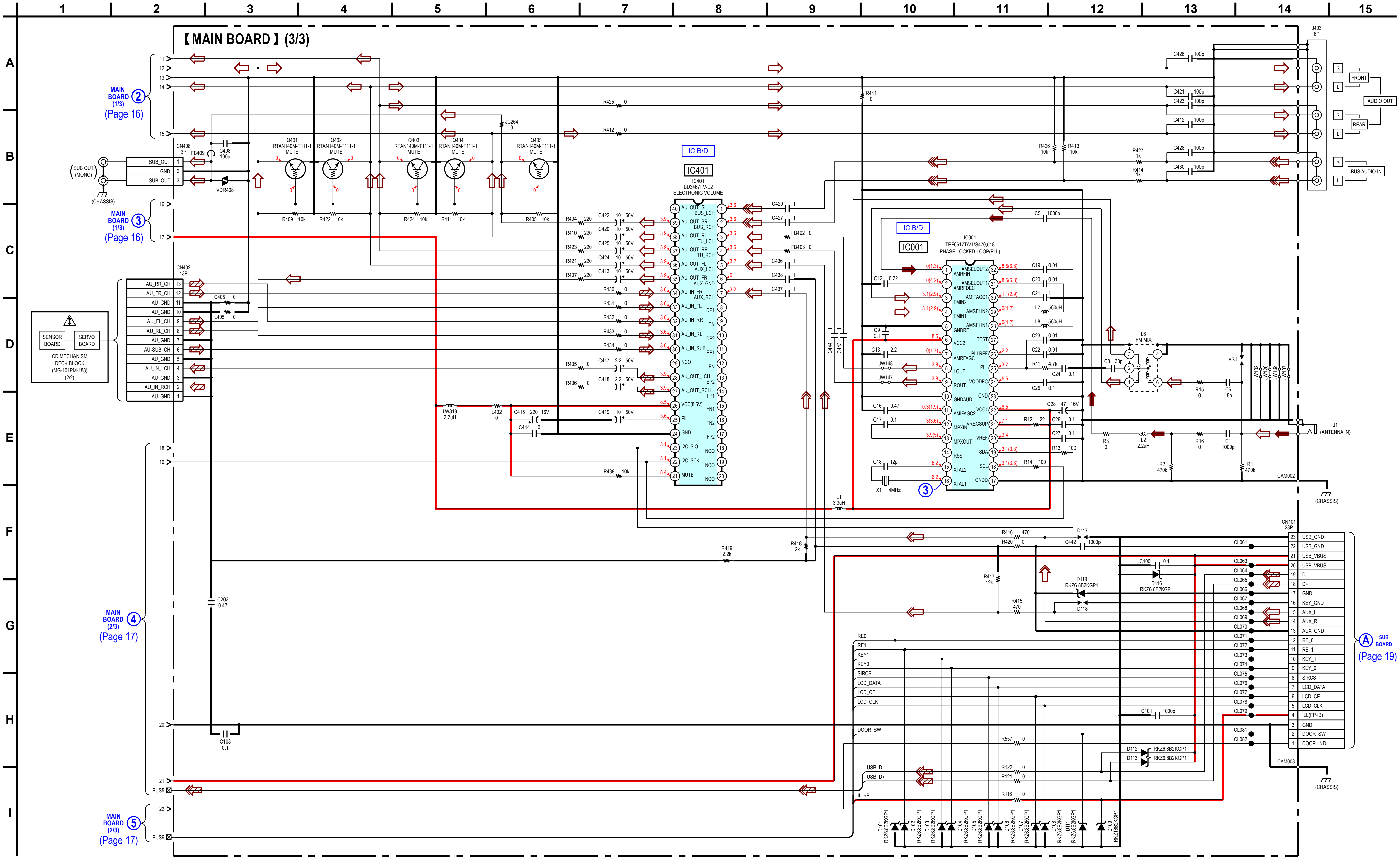


4-3. SCHEMATIC DIAGRAM - MAIN Section (2/3) -

• See page 22 for waveforms. • See page 22 for IC Block Diagrams. • See page 26 for IC Pin Function Description.



4-4. SCHEMATIC DIAGRAM - MAIN Section (3/3) - • See page 22 for waveforms. • See page 22 for IC Block Diagrams.

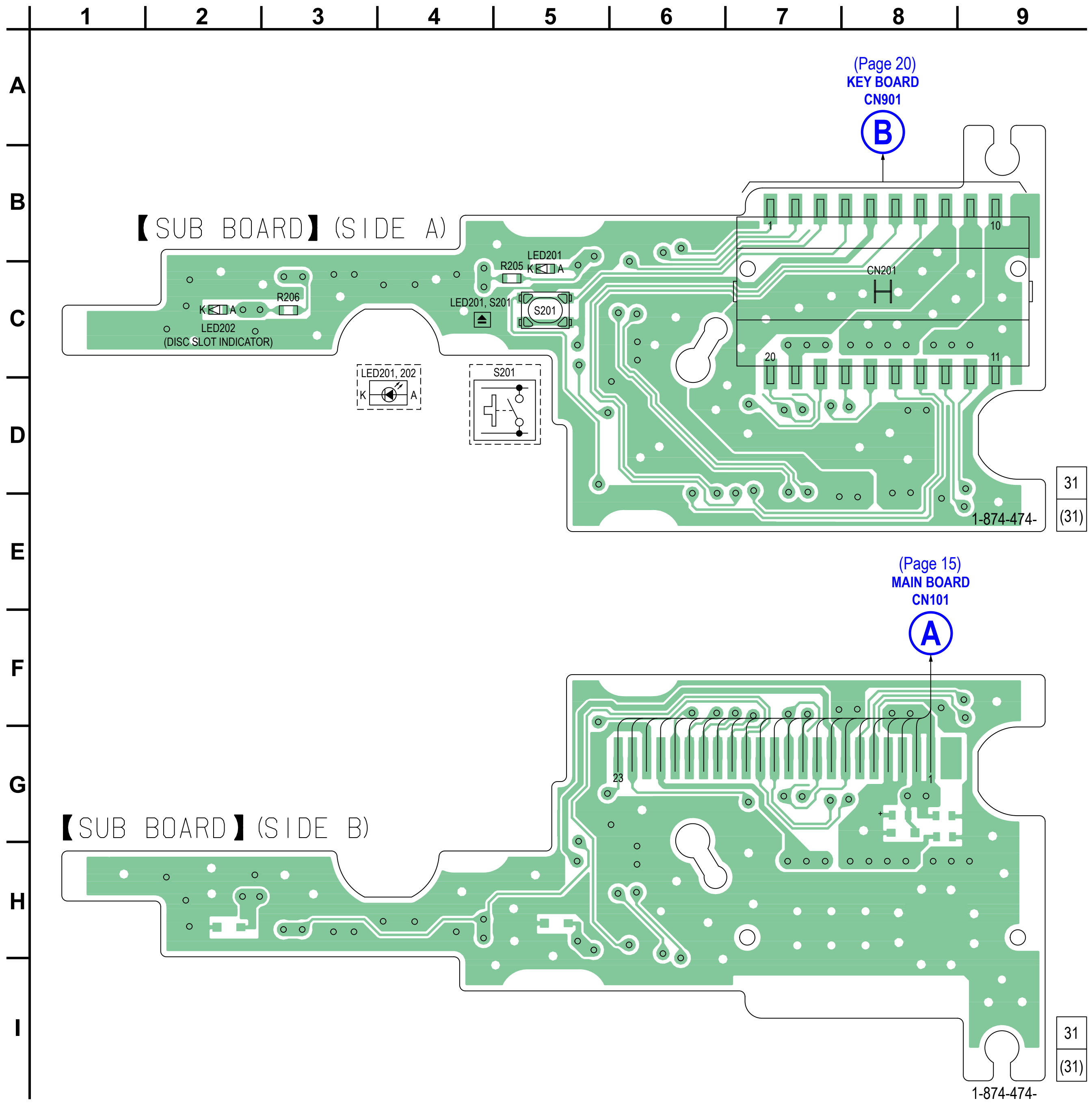


Note 1: When SERVO board is defective, exchange the complete mounted board.

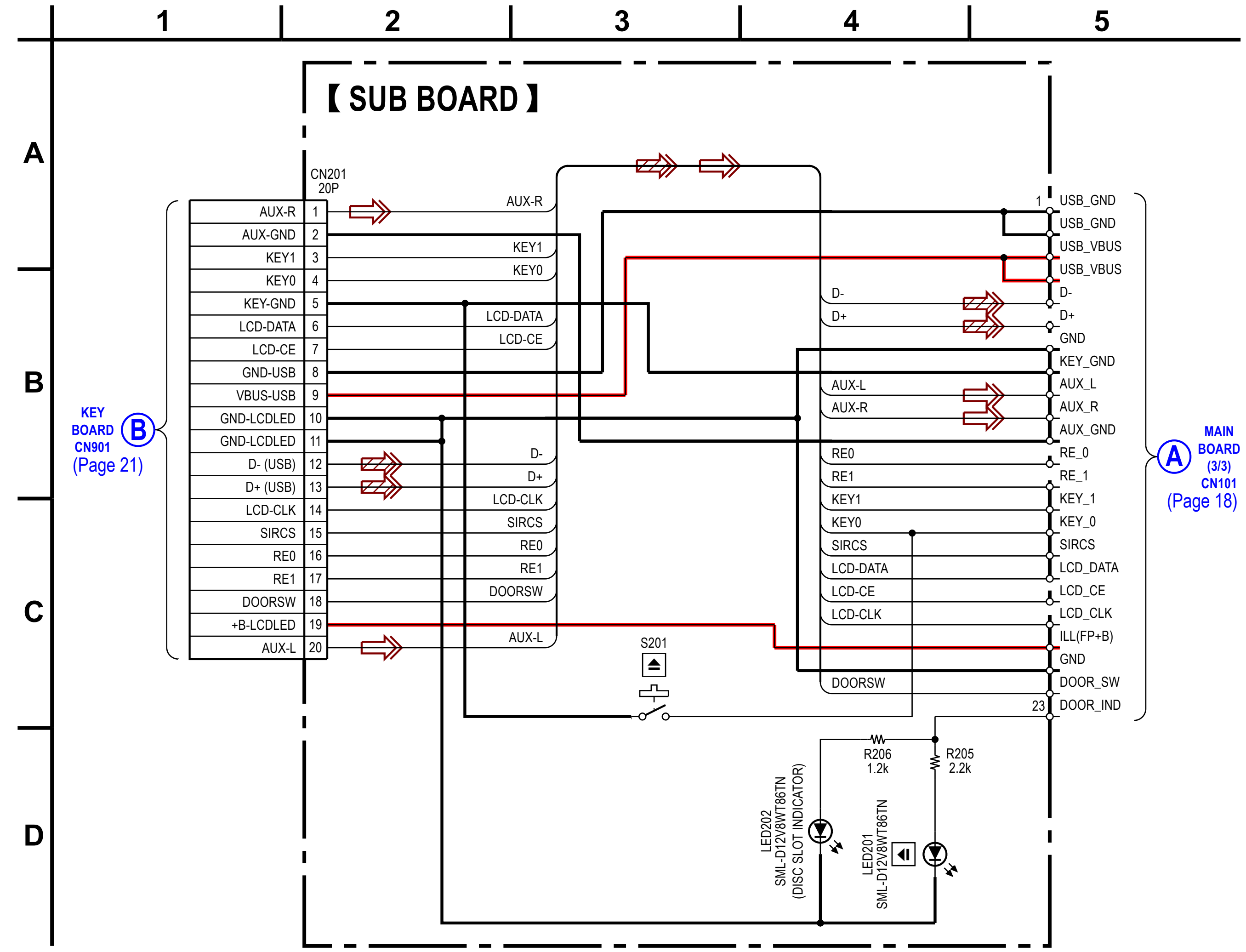
Note 2: When SENSOR board is defective, exchange the MECHANICAL BLOCK ASSY (P).

4-5. PRINTED WIRING BOARD - SUB Board -

• See page 14 for Circuit Boards Location. • : Uses unleaded solder.

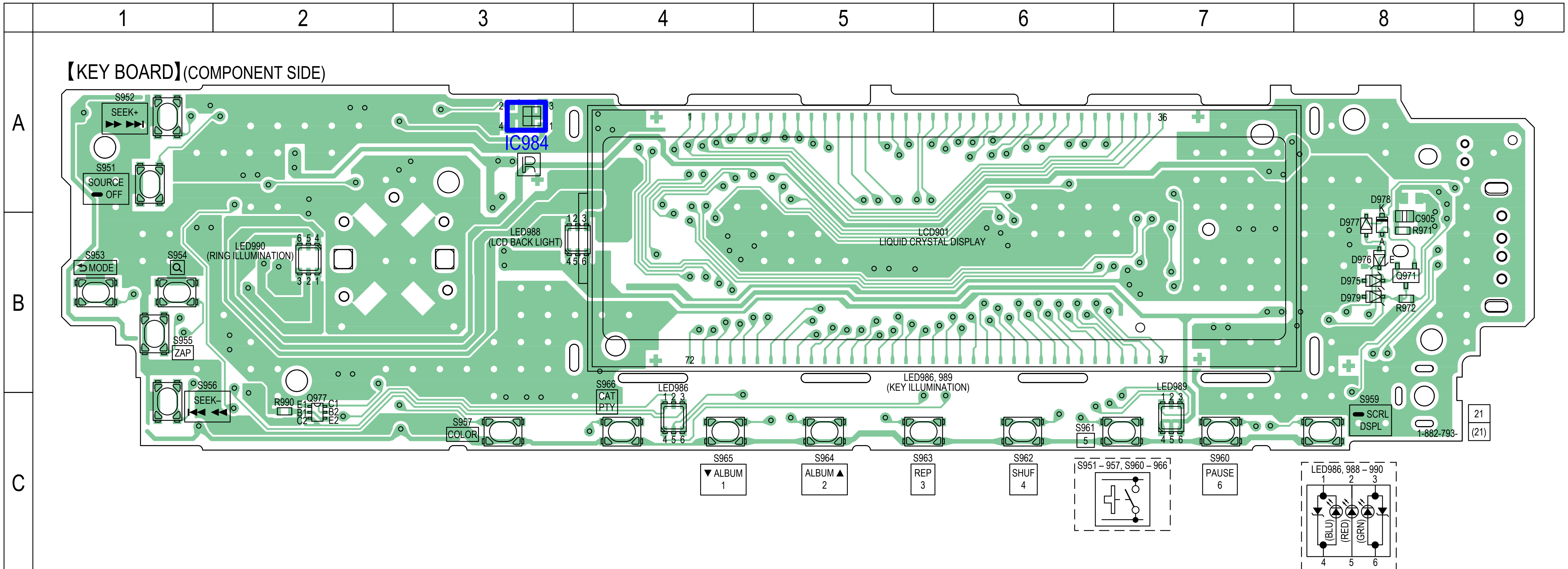


4-6. SCHEMATIC DIAGRAM - SUB Board -

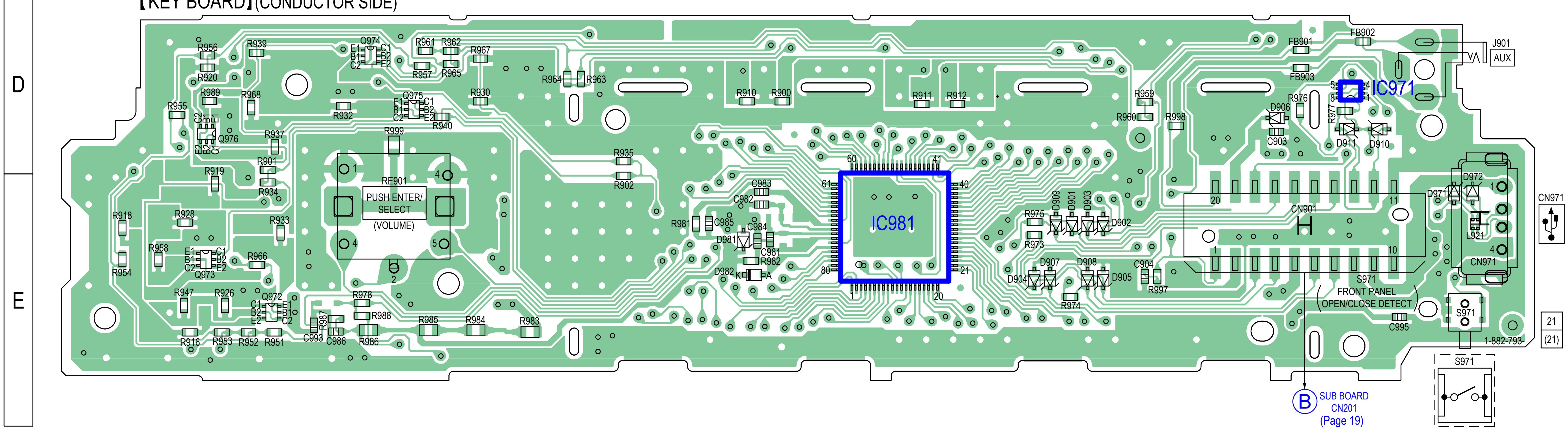


4-7. PRINTED WIRING BOARD - KEY Board - • See page 14 for Circuit Boards Location. • : Uses unleaded solder.

【KEY BOARD】(COMPONENT SIDE)

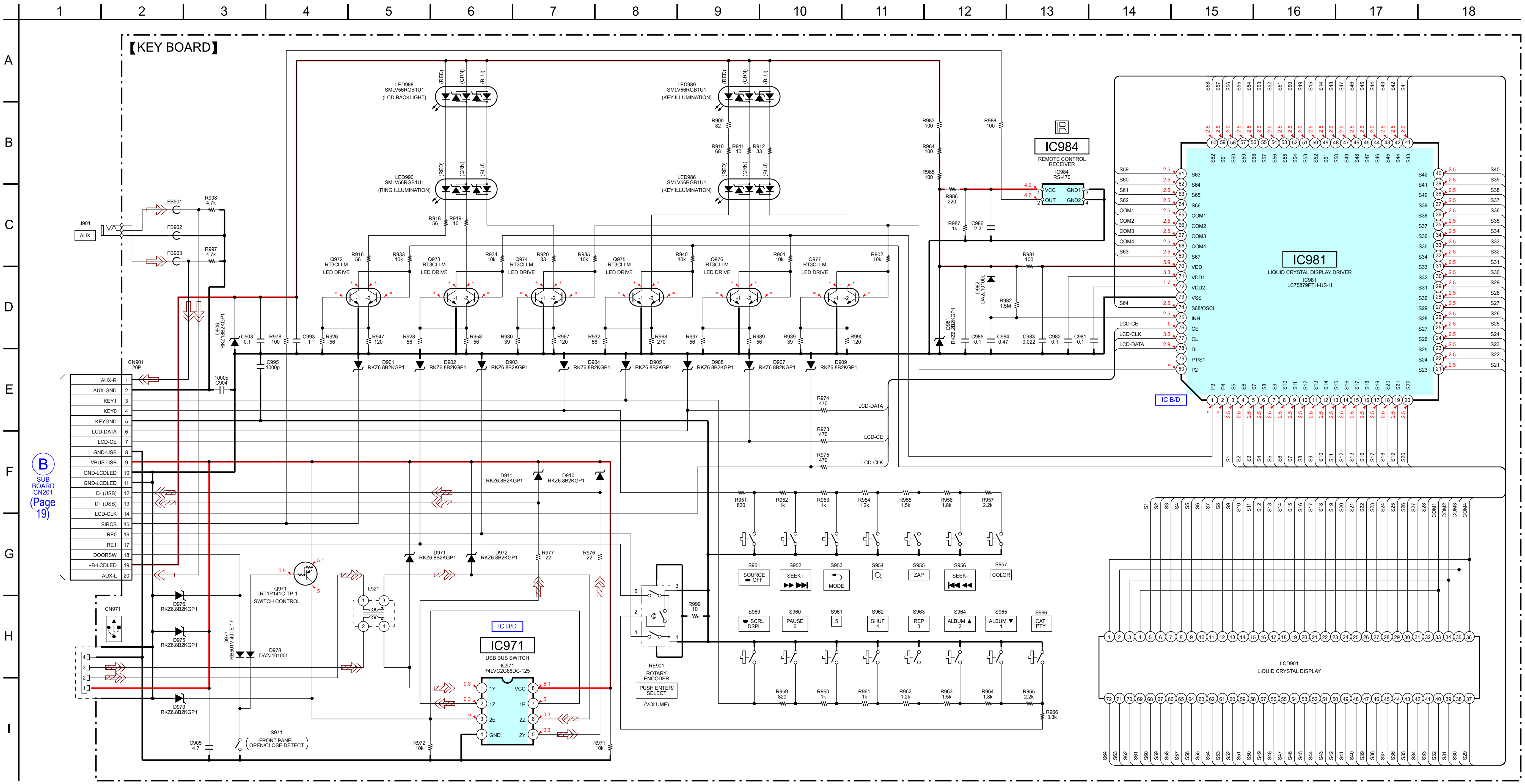


【KEY BOARD】(CONDUCTOR SIDE)



Note: Refer to the servicing notes "NOTE FOR REPLACEMENT OF THE USB CONNECTOR (CN971) AND THE AUX JACK (J901)" (See page x), if replacing the Ref. No. CN971 and the Ref. No. J901.

4-8. SCHEMATIC DIAGRAM - KEY Board - • See page 22 for IC Block Diagrams.

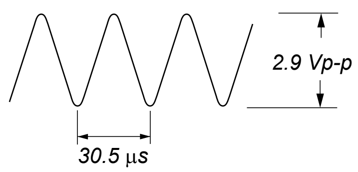


Note: Refer to the servicing notes "NOTE FOR REPLACEMENT OF THE USB CONNECTOR (CN971) AND THE AUX JACK (J901)" (See page x), if replacing the Ref. No. CN971 and the Ref. No. J901.

• Waveforms

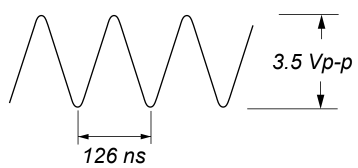
– MAIN Board –

① IC501 ⑪ (XOUT)



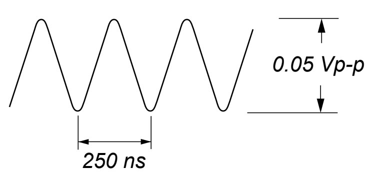
1 V/DIV, 20 μsec/DIV

② IC501 ⑬ (OSCOUT)



2 V/DIV, 50 nsec/DIV

③ IC001 ⑯ (XTAL1)

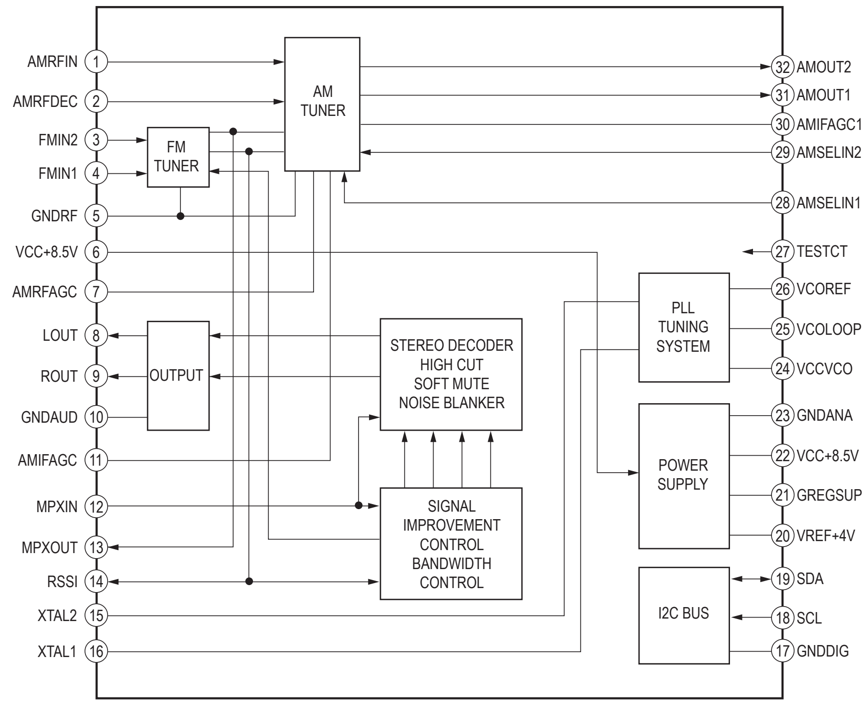


0.05 V/DIV, 50 nsec/DIV

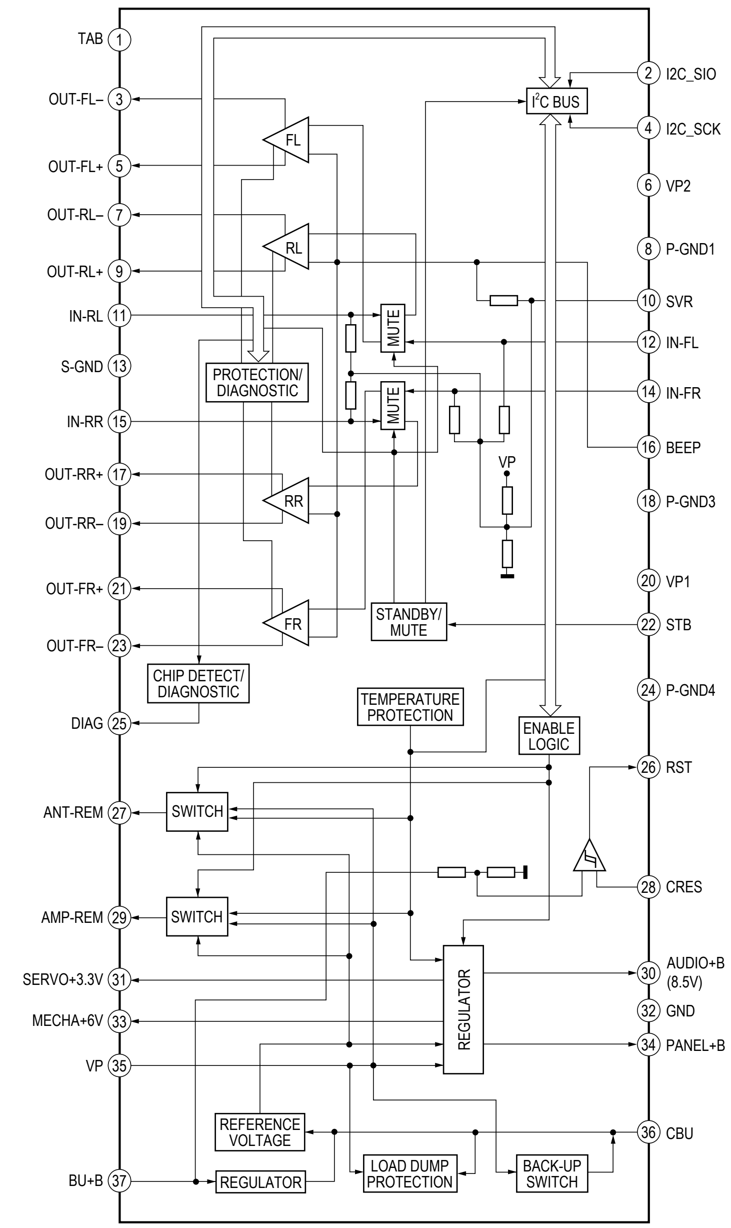
• IC Block Diagrams

– MAIN Board –

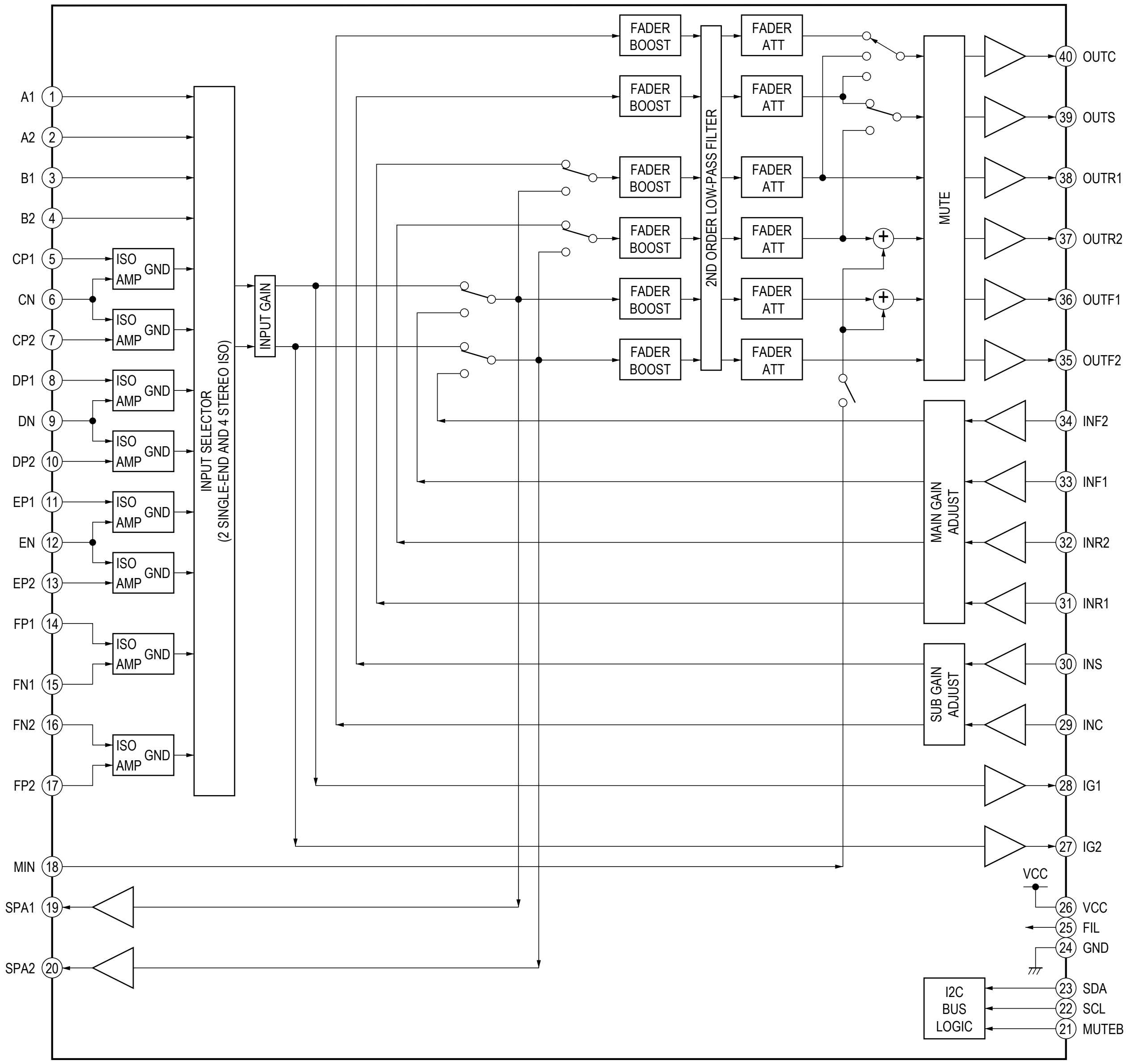
IC001 TEF6617T/V1/S470, 518



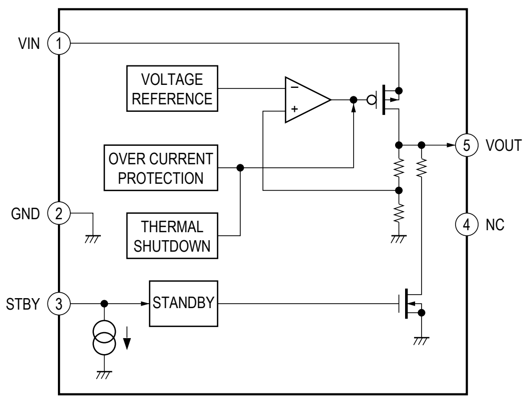
IC301 TDF8556AJ/N5



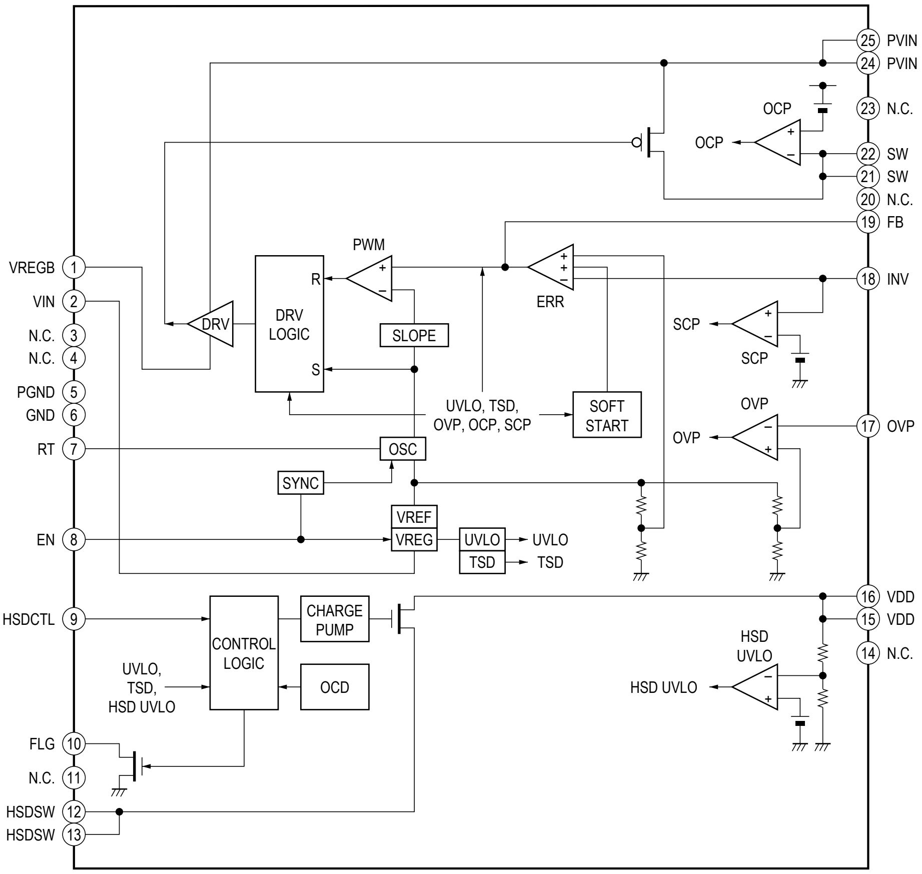
IC401 BD3467FV-E2



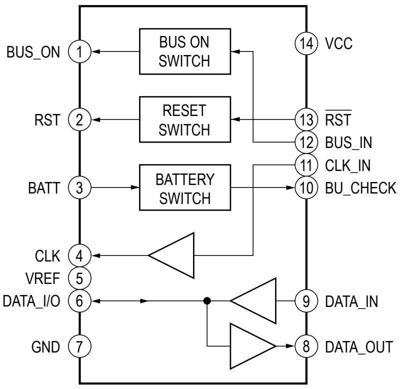
IC402 BU33TD3WG-TR



IC601 BD9070FP-E2

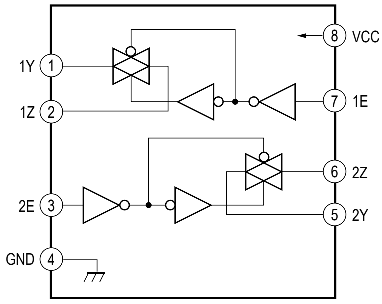


IC801 BA8271F-E2

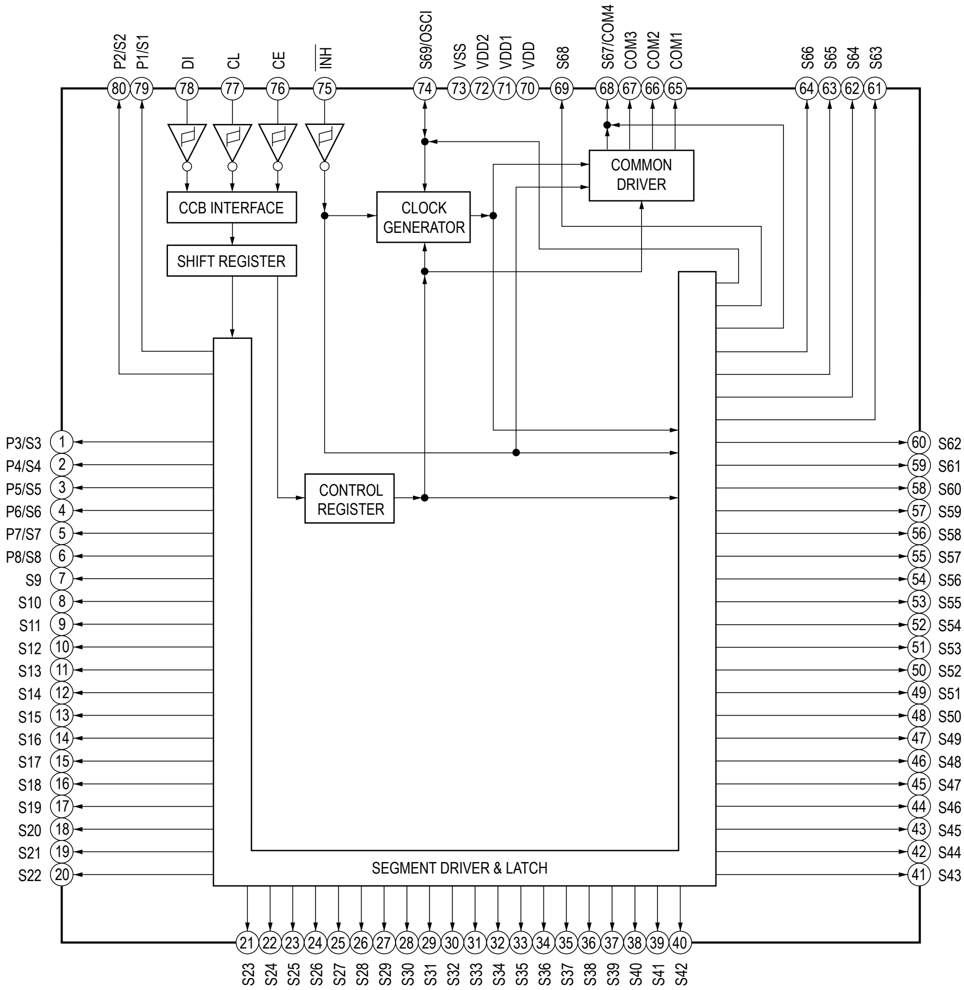


– KEY Board –

IC971 74LVC2G66DC-125



IC981 LC75879PT-US-H



- **IC Pin Function Description**

MAIN BOARD IC501 R5F3650KBDZ85FA (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	LCD_SO	O	Serial data output to the liquid crystal display driver
2	LCD_CLK	O	Serial data transfer clock signal output to the liquid crystal display driver
3	NOSE_SW	I	Front panel remove/attach detection switch input terminal "L": front panel is attached
4	SIRCS	I	SIRCS signal input from the remote control receiver
5	UNISO	O	Serial data output to the bus interface
6	UNISI	I	Serial data input from the bus interface
7	UNISCK	O	Serial data transfer clock signal output to the bus interface
8	BYTE	I	External data bus width selection signal input terminal
9	CNVSS	I	Processor mode selection signal input terminal
10	XIN	I	Sub system clock signal input terminal (32.768 kHz)
11	XOUT	O	Sub system clock signal output terminal (32.768 kHz)
12	RESET	I	System reset signal input from the reset signal generator and RESET switch "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it change to "H"
13	OSCOUT	O	Main system clock signal output terminal (7.92 MHz)
14	VSS	-	Ground terminal
15	OSCIN	I	Main system clock signal input terminal (7.92 MHz)
16	VCC1	-	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt signal input terminal Fixed at "H" in this unit
18	RC_IN1	I	Rotary commander shift key signal input terminal
19	BUIN	I	Back-up power detection signal input from the bus interface
20	SYSRST	O	System reset signal output to the CD mechanism deck block "L": reset
21	BUS_ON	O	VBUS power control signal output to the bus interface
22	MC_RX	I	Serial data input from the CD mechanism deck block
23	DOOR_SW	I	Front panel open/close detection switch input terminal "L": front panel is closed
24	MC_TX	O	Serial data output to the CD mechanism deck block
25	DOOR_ING	O	LED drive signal output terminal for disc slot indicator "H": LED on
26	SYNC_OUT	O	Frequency control signal output to the USB VBUS power control
27	EJECT_OK	O	Eject OK signal output to the CD mechanism deck block
28	BEEP	O	Beep signal output to the power amplifier
29	I2C_SCK	O	IIC communication serial clock signal output to the PLL, power amplifier and electrical volume
30	I2C_SIO	I/O	IIC communication serial data input/output with the PLL, power amplifier and electrical volume
31	FW_TXD	O	Serial data output terminal for flash writing
32	FW_RXD	I	Serial data input terminal for flash writing
33	FW_CLK	I	Serial clock signal input terminal for flash writing
34	FW_BUSY	O	Busy signal output terminal for flash writing
35, 36	NCO	O	Not used
37	CD_ON	I	CD mechanism servo power control request signal input from the CD mechanism deck block
38	CDM_ON	I	CD mechanism deck power control request signal input from the CD mechanism deck block
39	WAKE_UP	O	Wake-up signal output to the CD mechanism deck block
40	Z_MUTE	I	Zero detection muting signal input from the CD mechanism deck block
41	EPM	O	EPM signal output terminal Not used
42	MODELNAME_SEL0	I	Model name selection signal input terminal Fixed at "L" in this unit
43	MODELNAME_SEL1	I	Model name selection signal input terminal Fixed at "H" in this unit
44	MODELNAME_SEL2	I	Model name selection signal input terminal Fixed at "L" in this unit
45	MODELNAME_SEL3	I	Model name selection signal input terminal Fixed at "H" in this unit
46	CE	O	Chip enable signal output terminal Not used
47	NCO	O	Not used
48	SA_DATAIN	I	Spectrum analyzer serial data input from the CD mechanism deck block
49	SA_CLKOUT	O	Spectrum analyzer serial clock signal output to the CD mechanism deck block
50	USBON	O	USB power control signal output to the USB VBUS power control
51	VBUS_ON	I	VBUS power control request signal input from the CD mechanism deck block "H": VBUS on
52	USB_OVR	I	USB over current detection signal input from the USB VBUS power control
53	EXTATT_XEN	O	Not used
54	NCO	O	Not used

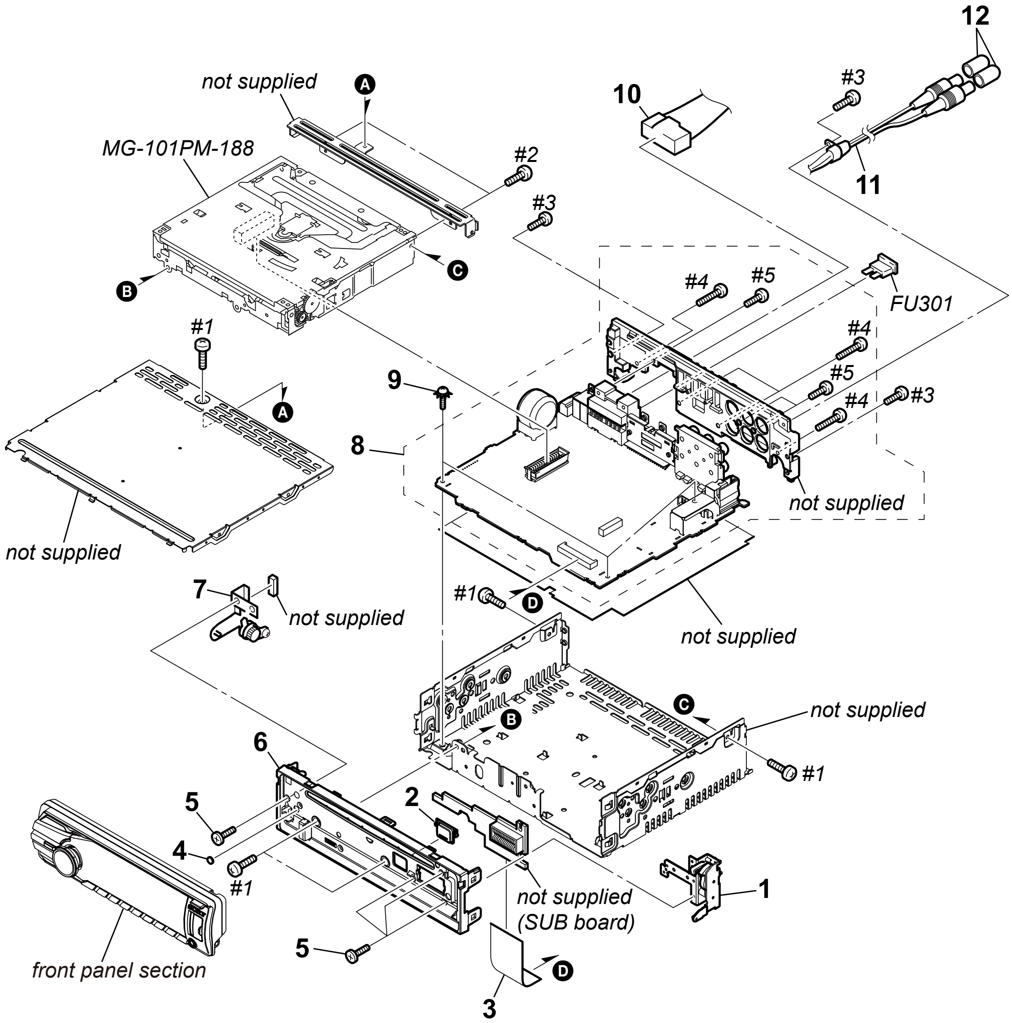
Pin No.	Pin Name	I/O	Description
55	F_AUX_ATT	I	Front AUX input muting detection signal input terminal "H": Front AUX input
56	TELATT	I	Telephone attenuator detection signal input terminal
57	ACC_IN	I	Accessory power detection signal input terminal
58	ATT	O	Audio muting control signal output terminal
59	DIAG	I	Condition signal input from the power amplifier
60	AMPSTB	O	Standby signal output to the power amplifier
61	CYRIL_SEL	I	Cyril selection signal input terminal Fixed at "L" in this unit
62	VCC2	-	Power supply terminal (+3.3V)
63	NCO	O	Not used
64	VSS	-	Ground terminal
65	ILLUMI SEL	I	Key illumination voltage setting signal input terminal Fixed at "L" in this unit
66	COLSW SEL	I	Key illumination color change function signal input terminal Fixed at "H" in this unit
67	NCO	O	Not used
68	B-OUT SEL	I	Black out function setting signal input terminal Fixed at "L" in this unit
69	AREASEL3	I	Destination setting signal input terminal Fixed at "L" in this unit
70	AREASEL2	I	Destination setting signal input terminal Fixed at "L" in this unit
71	AREASEL1	I	Destination setting signal input terminal Fixed at "H" in this unit
72	AREASEL0	I	Destination setting signal input terminal Fixed at "L" in this unit
73	R/S SW SEL	I	REAR/SUB selection setting signal input terminal Fixed at "L" in this unit
74, 75	NCO	O	Not used
76	INITCOL_SEL	I	Key illumination initial color setting signal input terminal Fixed at "H" in this unit
77, 78	NCO	O	Not used
79, 80	DEBUG_1, DEBUG_2	O	Not used
81	RE-IN1	I	Jog dial pulse signal input from the rotary encoder (B phase input) (for volume)
82	RE-IN0	I	Jog dial pulse signal input from the rotary encoder (A phase input) (for volume)
83	ILL_IN	I	Illumination detection signal input terminal
84 to 90	NCO	O	Not used
91	KEYACK0	I	Key acknowledge detection signal input terminal for the rotary commander key entry
92	KEYACK1	I	Key acknowledge detection signal input terminal for the front panel key entry
93	NCO	O	Not used
94, 95	KEYIN1, KEYIN0	I	Front panel key signal input terminal
96	AVSS	-	Ground terminal (for A/D converter)
97	RC_IN0	I	Rotary commander shift key input terminal
98	AVRH	-	Reference voltage terminal (+3.3V) (for A/D converter)
99	AVDD	-	Power supply terminal (+3.3V) (for A/D converter)
100	LCD_CE	O	Chip enable signal output to the liquid crystal display driver

SECTION 5
EXPLODED VIEWS

Note:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts Color ↑ Cabinet's Color

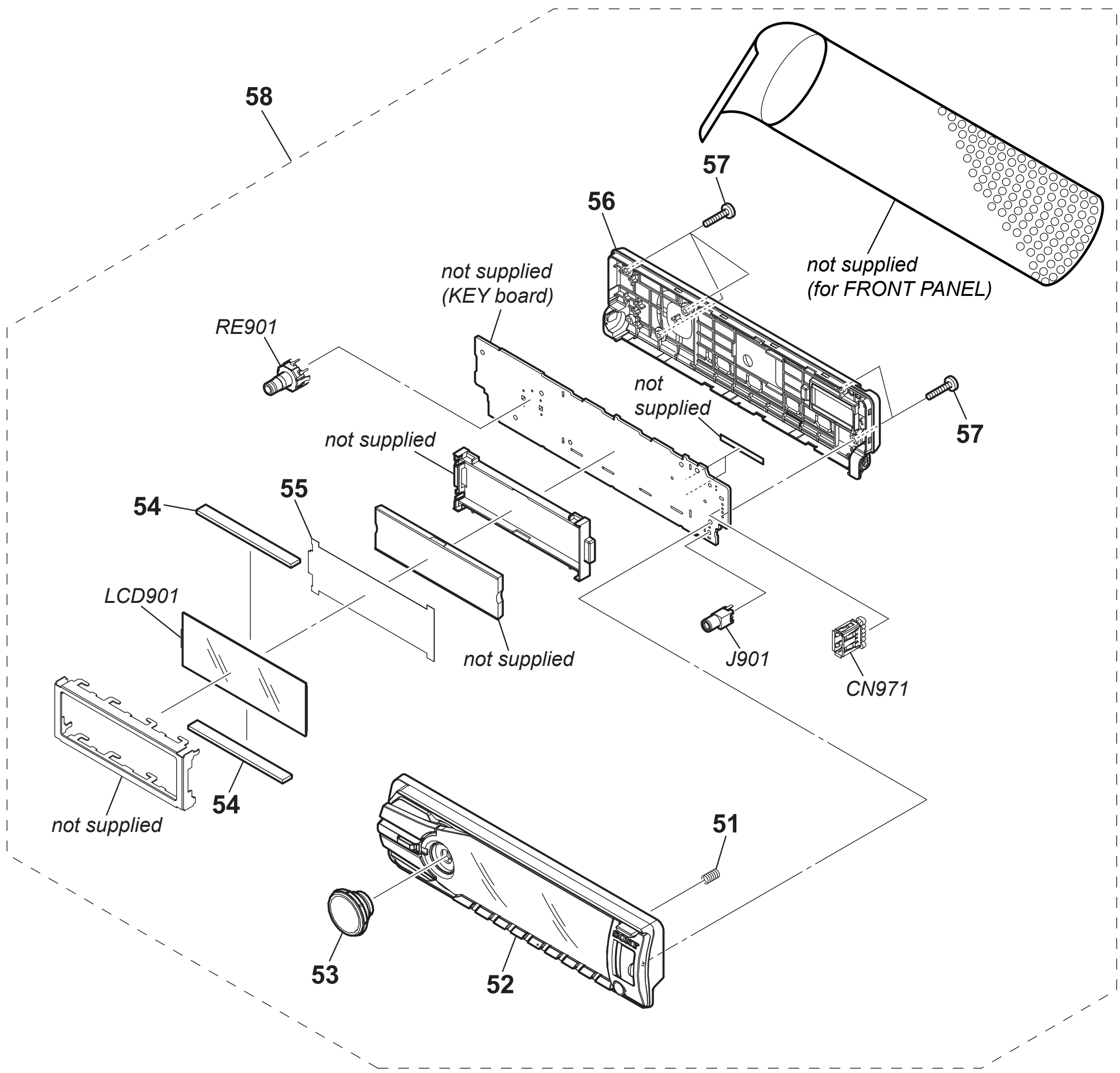
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

5-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	X-2176-199-1	LOCK ASSY	
2	3-246-441-02	BUTTON (EJECT) (⏏)	
3	1-834-627-11	CABLE, FLEXIBLE FLAT (23 CORE)	
4	3-260-247-01	CUSHION (SUB PANEL)	
5	3-042-244-01	SCREW (T)	
6	X-2547-696-1	PANEL (SUB) ASSY	
7	X-2515-757-1	GEAR ASSY	
8	A-1839-940-A	MAIN BOARD, COMPLETE	
9	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
10	1-839-377-11	CONNECTION CORD FOR AUTOMOBILE (POWER)	
11	1-833-835-11	CONNECTION CORD FOR AUTOMOBILE (SUB OUT (MONO))	
12	3-264-798-01	CAP	
FU301	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

5-2. FRONT PANEL SECTION

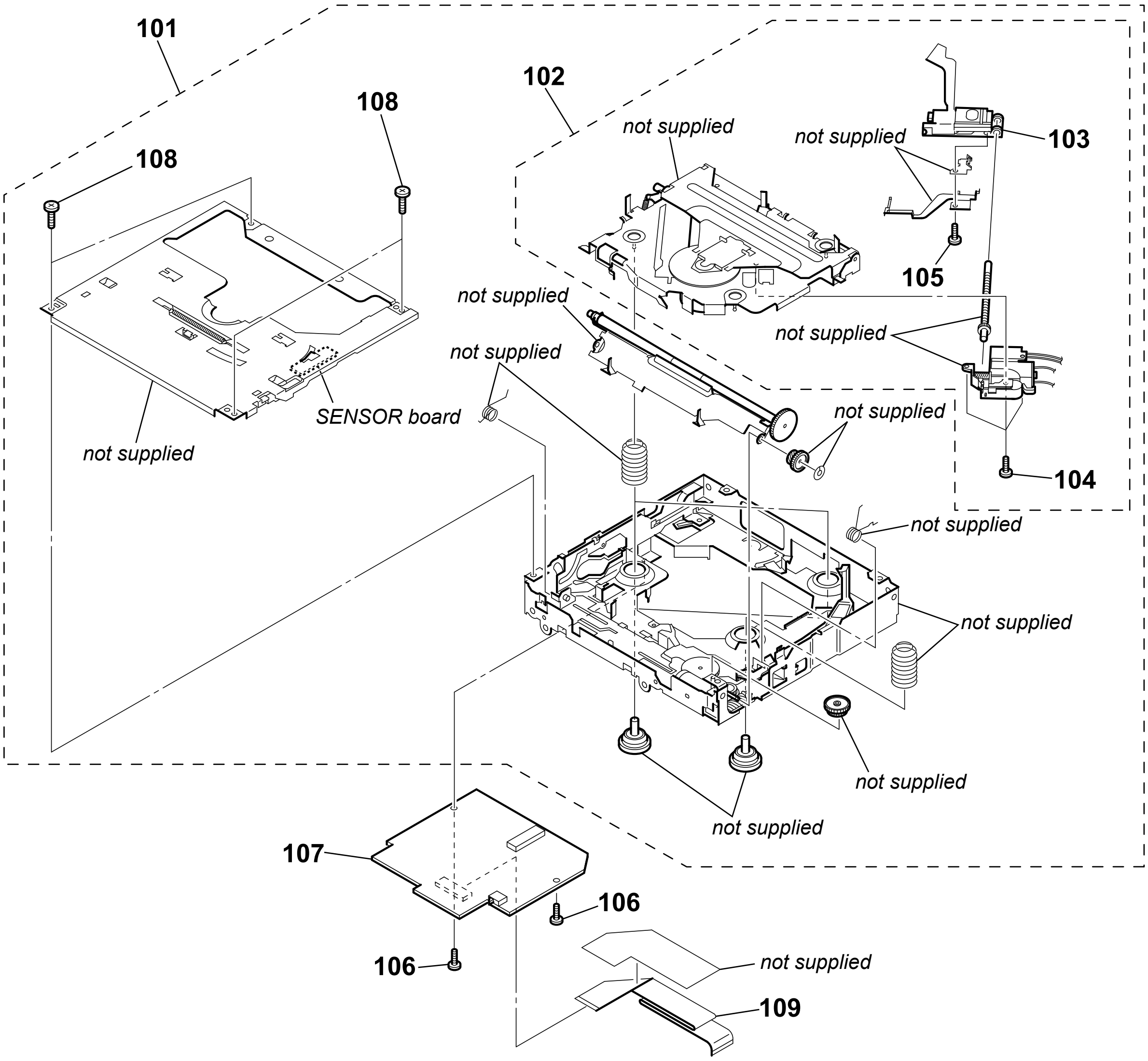


Note: Refer to the servicing notes "NOTE FOR REPLACEMENT OF THE USB CONNECTOR (CN971) AND THE AUX JACK (J901)" (See page 4), if replacing the Ref. No. CN971 and the Ref. No. J901.

Ref. No.	Part No.	Description	Remark
51	3-264-712-01	SPRING (OPEN)	
52	X-2581-982-1	PANEL (SV) ASSY, FRONT	
53	X-2582-550-1	KNOB ASSY (S)	
54	1-780-563-11	CONDUCTIVE BOARD, CONNECTION	
55	4-184-979-01	ILLUMINATOR (LCD)	
56	X-2548-577-1	PANEL (SV) ASSY, BACK	
57	3-250-543-21	SCREW (+B P-TITE M2)	

Ref. No.	Part No.	Description	Remark
58	A-1839-937-A	PANEL COMPLETE ASSY, FRONT	
CN971	1-842-336-11	USB CONNECTOR (ψ)	
J901	1-842-936-11	JACK (SMALL TYPE) (DIA. 3.5) (AUX)	
LCD901	1-811-223-11	DISPLAY PANEL, LIQUID CRYSTAL	
RE901	1-487-023-22	ROTARY ENCODER (PUSH ENTER/SELECT (VOLUME))	

5-3. CD MECHANISM SECTION (MG-101PM-188)



Ref. No.	Part No.	Description	Remark
101	A-1795-758-A	MECHANICAL BLOCK ASSY (P)	
⚠ 102	A-1284-705-A	DAXEV08	
⚠ 103	X-2149-672-1	OPTICAL PICK-UP (DAX-25A) (for SERVICE)	
104	2-626-869-31	SCREW (M2X3), SERRATION	
105	3-686-458-21	SCREW (P1.4), TAPPING	
106	3-352-758-31	SCREW (M1.7X2.5), TOOTHED LOCK	
107	A-1836-527-A	SERVO BOARD, COMPLETE	
108	2-134-636-71	SCREW (M1.7X2.5)	
109	1-838-286-11	CABLE, FLEXIBLE FLAT (13 CORE)	

SECTION 6
ELECTRICAL PARTS LIST

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . , uPA. . , μPA. . ,
  uPB. . : μPB. . , uPC. . , μPC. . ,
  uPD. . : μPD. .

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		KEY BOARD	
		**********	
		< CAPACITOR >	
C903	1-100-597-91	CERAMIC CHIP 0.1uF 10% 25V	
C904	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C905	1-114-331-11	CERAMIC CHIP 4.7uF 10% 10V	
C981	1-100-597-91	CERAMIC CHIP 0.1uF 10% 25V	
C982	1-100-597-91	CERAMIC CHIP 0.1uF 10% 25V	
C983	1-164-227-11	CERAMIC CHIP 0.022uF 10% 25V	
C984	1-125-891-11	CERAMIC CHIP 0.47uF 10% 10V	
C985	1-100-597-91	CERAMIC CHIP 0.1uF 10% 25V	
C986	1-165-884-11	CERAMIC CHIP 2.2uF 10% 6.3V	
C993	1-100-352-91	CERAMIC CHIP 1uF 20% 16V	
C995	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
		< CONNECTOR >	
CN901	1-818-141-11	PLUG, CONNECTOR 20P	
		< DIODE >	
D901	8-719-069-57	DIODE UDZSUSTE-176.8B	
D902	8-719-069-57	DIODE UDZSUSTE-176.8B	
D903	8-719-069-57	DIODE UDZSUSTE-176.8B	
D904	8-719-069-57	DIODE UDZSUSTE-176.8B	
D905	8-719-069-57	DIODE UDZSUSTE-176.8B	
D906	6-501-180-01	DIODE UDZW-TE17-18B	
D907	8-719-069-57	DIODE UDZSUSTE-176.8B	
D908	8-719-069-57	DIODE UDZSUSTE-176.8B	
D909	8-719-069-57	DIODE UDZSUSTE-176.8B	
D910	8-719-069-57	DIODE UDZSUSTE-176.8B	
D911	8-719-069-57	DIODE UDZSUSTE-176.8B	
D971	8-719-069-57	DIODE UDZSUSTE-176.8B	
D972	8-719-069-57	DIODE UDZSUSTE-176.8B	
D975	8-719-069-57	DIODE UDZSUSTE-176.8B	
D976	8-719-069-57	DIODE UDZSUSTE-176.8B	
D977	8-719-058-24	DIODE RB501V-40TE-17	
D978	6-502-961-01	DIODE DA2J10100L	
D979	8-719-069-57	DIODE UDZSUSTE-176.8B	
D981	8-719-069-56	DIODE UDZSUSTE-176.2B	
D982	6-502-961-01	DIODE DA2J10100L	
		< FERRITE BEAD >	
FB901	1-414-385-21	INDUCTOR, FERRITE BEAD	
FB902	1-414-385-21	INDUCTOR, FERRITE BEAD	
FB903	1-414-385-21	INDUCTOR, FERRITE BEAD	
		< IC >	
IC971	6-710-361-01	IC 74LVC2G66DC-125	
IC981	6-715-732-01	IC LC75879PT-US-H	
IC984	6-600-629-01	IC RS-470	
		< COIL >	
L921	1-457-223-11	COMMON MODE CHOKE COIL	
		< LED >	
LED986	6-503-357-01	LED SMLV56RGB1U1 (KEY ILLUMINATION)	
LED988	6-503-357-01	LED SMLV56RGB1U1 (LCD BACK LIGHT)	
LED989	6-503-357-01	LED SMLV56RGB1U1 (KEY ILLUMINATION)	
LED990	6-503-357-01	LED SMLV56RGB1U1 (RING ILLUMINATION)	
		< TRANSISTOR >	
Q971	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q972	6-551-272-01	TRANSISTOR RT3CLLM	
Q973	6-551-272-01	TRANSISTOR RT3CLLM	
Q974	6-551-272-01	TRANSISTOR RT3CLLM	
Q975	6-551-272-01	TRANSISTOR RT3CLLM	
Q976	6-551-272-01	TRANSISTOR RT3CLLM	
Q977	6-551-272-01	TRANSISTOR RT3CLLM	
		< RESISTOR >	
R900	1-216-808-11	METAL CHIP 82 5% 1/10W	
R901	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R902	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R910	1-216-807-11	METAL CHIP 68 5% 1/10W	
R911	1-216-797-11	METAL CHIP 10 5% 1/10W	
R912	1-216-803-11	METAL CHIP 33 5% 1/10W	
R916	1-216-806-11	METAL CHIP 56 5% 1/10W	
R918	1-216-806-11	METAL CHIP 56 5% 1/10W	
R919	1-216-797-11	METAL CHIP 10 5% 1/10W	
R920	1-216-803-11	METAL CHIP 33 5% 1/10W	
R926	1-216-806-11	METAL CHIP 56 5% 1/10W	
R928	1-216-806-11	METAL CHIP 56 5% 1/10W	
R930	1-216-804-11	METAL CHIP 39 5% 1/10W	
R932	1-216-806-11	METAL CHIP 56 5% 1/10W	
R933	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R934	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R935	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R937	1-216-806-11	METAL CHIP 56 5% 1/10W	
R939	1-216-804-11	METAL CHIP 39 5% 1/10W	
R940	1-216-833-11	METAL CHIP 10K 5% 1/10W	

KEY **MAIN**

Ref. No.	Part No.	Description			Remark
R947	1-216-810-11	METAL CHIP	120	5%	1/10W
R951	1-216-820-11	METAL CHIP	820	5%	1/10W
R952	1-216-821-11	METAL CHIP	1K	5%	1/10W
R953	1-216-821-11	METAL CHIP	1K	5%	1/10W
R954	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R955	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R956	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R957	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R958	1-216-806-11	METAL CHIP	56	5%	1/10W
R959	1-216-820-11	METAL CHIP	820	5%	1/10W
R960	1-216-821-11	METAL CHIP	1K	5%	1/10W
R961	1-216-821-11	METAL CHIP	1K	5%	1/10W
R962	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R963	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R964	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R965	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R966	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R967	1-216-810-11	METAL CHIP	120	5%	1/10W
R968	1-216-814-11	METAL CHIP	270	5%	1/10W
R971	1-216-833-11	METAL CHIP	10K	5%	1/10W
R972	1-216-833-11	METAL CHIP	10K	5%	1/10W
R973	1-216-817-11	METAL CHIP	470	5%	1/10W
R974	1-216-817-11	METAL CHIP	470	5%	1/10W
R975	1-216-817-11	METAL CHIP	470	5%	1/10W
R976	1-216-801-11	METAL CHIP	22	5%	1/10W
R977	1-216-801-11	METAL CHIP	22	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-809-11	METAL CHIP	100	5%	1/10W
R982	1-216-859-11	METAL CHIP	1.5M	5%	1/10W
R983	1-216-025-11	METAL CHIP	100	5%	1/10W
R984	1-216-025-11	METAL CHIP	100	5%	1/10W
R985	1-216-025-11	METAL CHIP	100	5%	1/10W
R986	1-216-033-00	METAL CHIP	220	5%	1/10W
R987	1-216-821-11	METAL CHIP	1K	5%	1/10W
R988	1-216-809-11	METAL CHIP	100	5%	1/10W
R989	1-216-806-11	METAL CHIP	56	5%	1/10W
R990	1-216-810-11	METAL CHIP	120	5%	1/10W
R997	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R998	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R999	1-216-001-00	METAL CHIP	10	5%	1/10W
		< SWITCH >			
S951	1-786-653-21	SWITCH, TACTILE (SOURCE, ▬ OFF)			
S952	1-786-653-21	SWITCH, TACTILE (SEEK+, ▶▶ ▶▶|)			
S953	1-786-653-21	SWITCH, TACTILE (↶, MODE)			
S954	1-786-653-21	SWITCH, TACTILE (🔍)			
S955	1-786-653-21	SWITCH, TACTILE (ZAP)			
S956	1-786-653-21	SWITCH, TACTILE (SEEK−, |◀◀ ◀◀)			
S957	1-786-653-21	SWITCH, TACTILE (COLOR)			
S959	1-786-653-21	SWITCH, TACTILE (▬ SCRL, DSPL)			
S960	1-786-653-21	SWITCH, TACTILE (PAUSE, 6)			
S961	1-786-653-21	SWITCH, TACTILE (5)			
S962	1-786-653-21	SWITCH, TACTILE (SHUF, 4)			
S963	1-786-653-21	SWITCH, TACTILE (REP, 3)			
S964	1-786-653-21	SWITCH, TACTILE (ALBUM ▲, 2)			
S965	1-786-653-21	SWITCH, TACTILE (▼ ALBUM, 1)			
S966	1-786-653-21	SWITCH, TACTILE (CAT, PTY)			
S971	1-798-032-11	SWITCH, DETECTION (FRONT PANEL OPEN/SLOSE DETECT)			

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Ref. No.	Part No.	Description			Remark
	A-1839-940-A	MAIN BOARD, COMPLETE			
		*********************			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C5	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C6	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C8	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C9	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C12	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C13	1-100-742-91	CERAMIC CHIP	2.2uF	20%	10V
C16	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C17	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C18	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C19	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C20	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C21	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C22	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C23	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C24	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C25	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C26	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C27	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C28	1-126-947-11	ELECT	47uF	20%	35V
C100	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C101	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C103	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C203	1-100-385-91	CERAMIC CHIP	0.47uF		25V
C263	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C300	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C301	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C302	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C303	1-128-551-11	ELECT	22uF	20%	63V
C304	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C305	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C306	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C308	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C312	1-124-233-11	ELECT	10uF	20%	16V
C313	1-126-947-11	ELECT	47uF	20%	35V
C315	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C316	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C318	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C319	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C320	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C321	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C322	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C323	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C324	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C327	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C328	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C329	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C330	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C331	1-126-163-11	ELECT	4.7uF	20%	50V
C333	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C334	1-163-009-91	CERAMIC CHIP	0.001uF	10%	50V
C335	1-163-009-91	CERAMIC CHIP	0.001uF	10%	50V
C336	1-116-894-11	ELECT	3300uF	20%	16V
C337	1-165-319-11	CERAMIC CHIP	0.1uF		50V

Ref. No.	Part No.	Description			Remark
C401	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C402	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C403	1-128-057-11	ELECT	330uF	20%	6.3V
C405	1-216-864-11	SHORT CHIP	0		
C407	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C408	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C409	1-126-926-11	ELECT	1000uF	20%	10V
C411	1-128-057-11	ELECT	330uF	20%	6.3V
C412	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C413	1-126-964-11	ELECT	10uF	20%	50V
C414	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C415	1-126-934-11	ELECT	220uF	20%	16V
C416	1-124-589-11	ELECT	47uF	20%	16V
C417	1-124-257-00	ELECT	2.2uF	20%	50V
C418	1-124-257-00	ELECT	2.2uF	20%	50V
C419	1-126-964-11	ELECT	10uF	20%	50V
C420	1-126-964-11	ELECT	10uF	20%	50V
C421	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C422	1-126-964-11	ELECT	10uF	20%	50V
C423	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C424	1-126-964-11	ELECT	10uF	20%	50V
C425	1-126-964-11	ELECT	10uF	20%	50V
C426	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C427	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C428	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C429	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C430	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C436	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C437	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C438	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C442	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C443	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C444	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C447	1-124-584-00	ELECT	100uF	20%	10V
C502	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C504	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C507	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C508	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C510	1-115-156-11	CERAMIC CHIP	1uF		10V
C512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C517	1-216-864-11	SHORT CHIP	0		
C518	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C520	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C521	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C522	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C523	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C600	1-125-972-61	ELECT	100uF	20%	16V
C602	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C603	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C604	1-100-671-11	CERAMIC CHIP	4.7uF	20%	25V
C605	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C606	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C607	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C609	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C611	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C612	1-126-935-11	ELECT	470uF	20%	16V
C613	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C614	1-165-733-91	ELECT	100uF	20%	25V
C615	1-125-972-61	ELECT	100uF	20%	16V
C701	1-124-584-00	ELECT	100uF	20%	10V
C703	1-124-233-11	ELECT	10uF	20%	16V
C704	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C710	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C711	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C801	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C802	1-126-941-11	ELECT	470uF	20%	25V
C809	1-165-319-11	CERAMIC CHIP	0.1uF		50V
		< CONNECTOR >			
CN101	1-770-530-31	CONNECTOR, FFC/FPC 23P			
CN301	1-774-701-21	PIN, CONNECTOR 16P			
CN402	1-818-174-11	CONNECTOR, FPC/FFC 13P			
CN408	1-564-506-11	PLUG, CONNECTOR 3P			
CN701	1-842-487-12	CONNECTOR, BOARD TO BOARD 28P			
CN801	1-580-907-41	PLUG, CONNECTOR			
		< DIODE/SURGE ABSORBER >			
D101	8-719-069-57	DIODE UDZSUSTE-176.8B			
D102	8-719-069-57	DIODE UDZSUSTE-176.8B			
D103	8-719-069-57	DIODE UDZSUSTE-176.8B			
D104	8-719-069-57	DIODE UDZSUSTE-176.8B			
D105	8-719-069-57	DIODE UDZSUSTE-176.8B			
D106	8-719-069-57	DIODE UDZSUSTE-176.8B			
D107	8-719-069-57	DIODE UDZSUSTE-176.8B			
D108	8-719-069-57	DIODE UDZSUSTE-176.8B			
D109	6-501-180-01	DIODE UDZW-TE17-18B			
D111	8-719-069-57	DIODE UDZSUSTE-176.8B			
D112	8-719-069-57	DIODE UDZSUSTE-176.8B			
D113	8-719-069-57	DIODE UDZSUSTE-176.8B			
D116	8-719-069-57	DIODE UDZSUSTE-176.8B			
D117	1-805-043-11	ABSORBER, CHIP SURGE			
D118	1-805-043-11	ABSORBER, CHIP SURGE			
D119	8-719-069-57	DIODE UDZSUSTE-176.8B			
D301	6-501-180-01	DIODE UDZW-TE17-18B			
D303	6-502-643-01	DIODE 1A4-A2			
D307	6-501-180-01	DIODE UDZW-TE17-18B			
D308	6-502-961-01	DIODE DA2J10100L			
D318	6-502-643-01	DIODE 1A4-A2			
D320	6-501-180-01	DIODE UDZW-TE17-18B			
D321	6-502-643-01	DIODE 1A4-A2			
D322	6-501-180-01	DIODE UDZW-TE17-18B			
D323	6-501-180-01	DIODE UDZW-TE17-18B			
D324	6-502-643-01	DIODE 1A4-A2			
D401	6-502-961-01	DIODE DA2J10100L			
D402	6-500-334-01	DIODE MC2836-T112-1			
D403	6-501-817-01	DIODE MA2J1110GLS0			
D404	6-501-817-01	DIODE MA2J1110GLS0			
D501	8-719-069-57	DIODE UDZSUSTE-176.8B			
D601	6-503-548-01	DIODE DB2441600L			
D731	6-501-013-01	DIODE BAT54ALT1G			
D801	6-502-131-01	DIODE LRB751V-40T1G			
D802	6-501-180-01	DIODE UDZW-TE17-18B			
D803	6-501-180-01	DIODE UDZW-TE17-18B			
D804	6-501-180-01	DIODE UDZW-TE17-18B			
D806	8-719-069-56	DIODE UDZSUSTE-176.2B			
D807	6-501-180-01	DIODE UDZW-TE17-18B			

MAIN

Ref. No.	Part No.	Description		Remark
		< JUMPER RESISTOR/FERRITE BEAD >		
FB401	1-216-295-91	SHORT CHIP	0	
FB402	1-216-864-11	SHORT CHIP	0	
FB403	1-216-864-11	SHORT CHIP	0	
FB409	1-500-329-21	INDUCTOR, FERRITE BEAD		
FB501	1-414-595-11	INDUCTOR, FERRITE BEAD		
FB704	1-414-595-11	INDUCTOR, FERRITE BEAD		
FB705	1-414-595-11	INDUCTOR, FERRITE BEAD		
FB706	1-414-595-11	INDUCTOR, FERRITE BEAD		
FB801	1-414-595-11	INDUCTOR, FERRITE BEAD		
FB802	1-414-595-11	INDUCTOR, FERRITE BEAD		
FB826	1-414-595-11	INDUCTOR, FERRITE BEAD		
		< IC >		
IC001	6-714-162-01	IC TEF6617T/V1/S470, 518		
IC301	6-715-848-21	IC TDF8556AJ/N5		
IC401	6-714-623-01	IC BD3467FV-E2		
IC402	6-717-694-01	IC BU33TD3WG-TR		
IC403	6-709-458-01	IC XC61CN2802NR		
IC501	6-718-034-01	IC R5F3650KBDZ85FA (for SERVICE)		
IC601	6-714-602-01	IC BD9070FP-E2		
IC801	6-703-884-01	IC BA8271F-E2		
		< JACK >		
J1	1-822-949-21	JACK (ANT) (ANTENNA IN)		
J403	1-822-714-11	JACK, PIN 6P (FRONT/REAR AUDIO OUT, BUS AUDIO IN)		
J801	1-566-822-81	JACK (REMOTE IN)		
		< JUMPER RESISTOR >		
JC103	1-216-296-11	SHORT CHIP	0	
JC106	1-216-864-11	SHORT CHIP	0	
JC116	1-216-296-11	SHORT CHIP	0	
JC120	1-216-296-11	SHORT CHIP	0	
JC121	1-216-295-91	SHORT CHIP	0	
JC123	1-216-296-11	SHORT CHIP	0	
JC131	1-216-296-11	SHORT CHIP	0	
JC256	1-216-864-11	SHORT CHIP	0	
JC257	1-216-864-11	SHORT CHIP	0	
JC260	1-216-864-11	SHORT CHIP	0	
JC261	1-216-864-11	SHORT CHIP	0	
JC262	1-216-295-91	SHORT CHIP	0	
JC263	1-216-295-91	SHORT CHIP	0	
JC264	1-216-864-11	SHORT CHIP	0	
JC265	1-216-296-11	SHORT CHIP	0	
JC267	1-216-296-11	SHORT CHIP	0	
JC268	1-216-295-91	SHORT CHIP	0	
JC269	1-216-864-11	SHORT CHIP	0	
JC271	1-216-864-11	SHORT CHIP	0	
JC273	1-216-296-11	SHORT CHIP	0	
JC274	1-216-295-91	SHORT CHIP	0	
JC276	1-216-296-11	SHORT CHIP	0	
JC277	1-216-295-91	SHORT CHIP	0	
JC281	1-216-296-11	SHORT CHIP	0	
JC282	1-216-296-11	SHORT CHIP	0	
JC289	1-216-296-11	SHORT CHIP	0	
JC290	1-216-296-11	SHORT CHIP	0	
JC291	1-216-296-11	SHORT CHIP	0	
JC292	1-216-295-91	SHORT CHIP	0	
JC295	1-216-295-91	SHORT CHIP	0	

Ref. No.	Part No.	Description			Remark
JC301	1-216-296-11	SHORT CHIP	0		
JC302	1-216-864-11	SHORT CHIP	0		
JC307	1-216-864-11	SHORT CHIP	0		
JC346	1-216-864-11	SHORT CHIP	0		
JC356	1-216-296-11	SHORT CHIP	0		
JC361	1-216-864-11	SHORT CHIP	0		
JC362	1-216-864-11	SHORT CHIP	0		
JC363	1-216-864-11	SHORT CHIP	0		
JC366	1-216-296-11	SHORT CHIP	0		
JC408	1-216-296-11	SHORT CHIP	0		
JC418	1-216-296-11	SHORT CHIP	0		
JC419	1-216-296-11	SHORT CHIP	0		
JC469	1-216-864-11	SHORT CHIP	0		
JC475	1-216-296-11	SHORT CHIP	0		
JC479	1-216-296-11	SHORT CHIP	0		
		< COIL >			
JW319	1-410-501-11	INDUCTOR	2.2uH		
L1	1-414-180-51	INDUCTOR	3.3uH		
L2	1-410-501-61	INDUCTOR	2.2uH		
L6	1-457-817-11	COIL (FM MIX)			
L7	1-481-285-51	INDUCTOR	560uH		
L8	1-481-285-51	INDUCTOR	560uH		
L301	1-456-617-11	COIL, CHOKE			
L302	1-216-295-91	SHORT CHIP	0		
L402	1-216-864-11	SHORT CHIP	0		
L405	1-216-295-91	SHORT CHIP	0		
L601	1-411-595-21	INDUCTOR	47uH		
L602	1-412-525-31	INDUCTOR	10uH		
L603	1-411-595-21	INDUCTOR	47uH		
		< TRANSISTOR >			
Q301	8-729-620-13	TRANSISTOR	2SC4154TP-1EF		
Q302	8-729-620-13	TRANSISTOR	2SC4154TP-1EF		
Q303	8-729-620-13	TRANSISTOR	2SC4154TP-1EF		
Q401	6-551-677-01	TRANSISTOR	RTAN140M-T111-1		
Q402	6-551-677-01	TRANSISTOR	RTAN140M-T111-1		
Q403	6-551-677-01	TRANSISTOR	RTAN140M-T111-1		
Q404	6-551-677-01	TRANSISTOR	RTAN140M-T111-1		
Q405	6-551-677-01	TRANSISTOR	RTAN140M-T111-1		
Q407	8-729-038-30	TRANSISTOR	RT1P141M-TP-1		
Q409	6-552-430-01	TRANSISTOR	DRC5114E0L		
Q501	6-552-410-01	TRANSISTOR	DRA5114E0L		
Q502	6-552-430-01	TRANSISTOR	DRC5114E0L		
Q802	6-552-430-01	TRANSISTOR	DRC5114E0L		
		< RESISTOR >			
R1	1-216-853-11	METAL CHIP	470K	5%	1/10W
R2	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3	1-216-864-11	SHORT CHIP	0		
R11	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R12	1-216-009-91	METAL CHIP	22	5%	1/10W
R13	1-216-809-11	METAL CHIP	100	5%	1/10W
R14	1-216-809-11	METAL CHIP	100	5%	1/10W
R15	1-216-864-11	SHORT CHIP	0		
R16	1-216-864-11	SHORT CHIP	0		
R116	1-216-295-91	SHORT CHIP	0		
R121	1-216-864-11	SHORT CHIP	0		
R122	1-216-864-11	SHORT CHIP	0		
R301	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description	Remark
R302	1-216-809-11	METAL CHIP 100 5% 1/10W	
R303	1-216-182-00	METAL CHIP 220 5% 1/8W	
R304	1-216-182-00	METAL CHIP 220 5% 1/8W	
R305	1-216-182-00	METAL CHIP 220 5% 1/8W	
R306	1-216-182-00	METAL CHIP 220 5% 1/8W	
R308	1-216-811-11	METAL CHIP 150 5% 1/10W	
R310	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R315	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R316	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R317	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R318	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R319	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R320	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R321	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R322	1-249-425-11	CARBON 4.7K 5% 1/4W	
R323	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R324	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R325	1-249-425-11	CARBON 4.7K 5% 1/4W	
R401	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R404	1-216-813-11	METAL CHIP 220 5% 1/10W	
R405	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R407	1-216-813-11	METAL CHIP 220 5% 1/10W	
R409	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R410	1-216-813-11	METAL CHIP 220 5% 1/10W	
R411	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R412	1-216-864-11	SHORT CHIP 0	
R413	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R414	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R415	1-216-817-11	METAL CHIP 470 5% 1/10W	
R416	1-216-817-11	METAL CHIP 470 5% 1/10W	
R417	1-216-834-11	METAL CHIP 12K 5% 1/10W	
R418	1-216-834-11	METAL CHIP 12K 5% 1/10W	
R419	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R420	1-216-295-91	SHORT CHIP 0	
R421	1-216-813-11	METAL CHIP 220 5% 1/10W	
R422	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R423	1-216-813-11	METAL CHIP 220 5% 1/10W	
R424	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R425	1-216-864-11	SHORT CHIP 0	
R426	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R427	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R429	1-216-801-11	METAL CHIP 22 5% 1/10W	
R430	1-216-864-11	SHORT CHIP 0	
R431	1-216-864-11	SHORT CHIP 0	
R432	1-216-864-11	SHORT CHIP 0	
R433	1-216-295-91	SHORT CHIP 0	
R434	1-216-295-91	SHORT CHIP 0	
R435	1-216-864-11	SHORT CHIP 0	
R436	1-216-864-11	SHORT CHIP 0	
R438	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R441	1-216-864-11	SHORT CHIP 0	
R500	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R501	1-219-570-11	METAL CHIP 10M 5% 1/10W	
R502	1-216-809-11	METAL CHIP 100 5% 1/10W	
R503	1-216-809-11	METAL CHIP 100 5% 1/10W	
R504	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R505	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R506	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R507	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R508	1-216-849-11	METAL CHIP 220K 5% 1/10W	
R509	1-216-864-11	SHORT CHIP 0	
R510	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R511	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R512	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R513	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R514	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R516	1-216-864-11	SHORT CHIP 0	
R517	1-216-864-11	SHORT CHIP 0	
R519	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R521	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R522	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R523	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R526	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R527	1-216-809-11	METAL CHIP 100 5% 1/10W	
R528	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R529	1-216-864-11	SHORT CHIP 0	
R530	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R531	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R532	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R533	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R534	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R535	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R536	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R538	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R539	1-216-809-11	METAL CHIP 100 5% 1/10W	
R540	1-216-809-11	METAL CHIP 100 5% 1/10W	
R541	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R542	1-216-864-11	SHORT CHIP 0	
R543	1-216-864-11	SHORT CHIP 0	
R544	1-216-809-11	METAL CHIP 100 5% 1/10W	
R545	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R546	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R547	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R550	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R551	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R553	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R555	1-216-864-11	SHORT CHIP 0	
R557	1-216-864-11	SHORT CHIP 0	
R559	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R561	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R562	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R563	1-216-864-11	SHORT CHIP 0	
R564	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R565	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R567	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R568	1-216-097-11	METAL CHIP 100K 5% 1/10W	
R570	1-216-817-11	METAL CHIP 470 5% 1/10W	
R571	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R572	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R575	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R577	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R580	1-216-809-11	METAL CHIP 100 5% 1/10W	
R581	1-216-857-11	METAL CHIP 1M 5% 1/10W	
R583	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R584	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R585	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R586	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R587	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R589	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R590	1-216-845-11	METAL CHIP 100K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R591	1-216-821-11	METAL CHIP	1K	5%	1/10W
R592	1-216-809-11	METAL CHIP	100	5%	1/10W
R593	1-216-809-11	METAL CHIP	100	5%	1/10W
R594	1-216-845-11	METAL CHIP	100K	5%	1/10W
R595	1-216-845-11	METAL CHIP	100K	5%	1/10W
R596	1-216-845-11	METAL CHIP	100K	5%	1/10W
R598	1-216-809-11	METAL CHIP	100	5%	1/10W
R599	1-216-845-11	METAL CHIP	100K	5%	1/10W
R601	1-216-841-11	METAL CHIP	47K	5%	1/10W
R602	1-216-817-11	METAL CHIP	470	5%	1/10W
R603	1-245-816-11	METAL CHIP	2.2K	0.5%	1/10W
R604	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R605	1-216-817-11	METAL CHIP	470	5%	1/10W
R606	1-216-817-11	METAL CHIP	470	5%	1/10W
R607	1-216-836-11	METAL CHIP	18K	5%	1/10W
R608	1-245-806-11	METAL CHIP	820	0.5%	1/10W
R609	1-245-816-11	METAL CHIP	2.2K	0.5%	1/10W
R610	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R611	1-249-413-11	CARBON	470	5%	1/4W
R701	1-216-864-11	SHORT CHIP	0		
R702	1-216-864-11	SHORT CHIP	0		
R705	1-216-864-11	SHORT CHIP	0		
R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R708	1-216-864-11	SHORT CHIP	0		
R709	1-216-845-11	METAL CHIP	100K	5%	1/10W
R710	1-216-809-11	METAL CHIP	100	5%	1/10W
R711	1-216-809-11	METAL CHIP	100	5%	1/10W
R713	1-216-845-11	METAL CHIP	100K	5%	1/10W
R716	1-216-864-11	SHORT CHIP	0		
R804	1-216-821-11	METAL CHIP	1K	5%	1/10W
R805	1-216-821-11	METAL CHIP	1K	5%	1/10W
R806	1-216-809-11	METAL CHIP	100	5%	1/10W
R807	1-216-851-11	METAL CHIP	330K	5%	1/10W
R808	1-216-864-11	SHORT CHIP	0		
R809	1-216-851-11	METAL CHIP	330K	5%	1/10W
R810	1-216-864-11	SHORT CHIP	0		
R811	1-216-864-11	SHORT CHIP	0		
R812	1-216-864-11	SHORT CHIP	0		
R813	1-216-809-11	METAL CHIP	100	5%	1/10W
R815	1-216-835-11	METAL CHIP	15K	5%	1/10W
R816	1-216-821-11	METAL CHIP	1K	5%	1/10W
R858	1-216-849-11	METAL CHIP	220K	5%	1/10W
R865	1-216-864-11	SHORT CHIP	0		
R866	1-216-821-11	METAL CHIP	1K	5%	1/10W
R867	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< SWITCH >			
S401	1-786-826-11	SWITCH, TACTILE (RESET)			
S501	1-786-458-11	SWITCH, PUSH (1 KEY) (NOSE DETECT)			
		< THERMISTOR >			
TH801	1-803-350-21	THERMISTOR, POSITIVE			
		< VARISTOR >			
VDR408	1-804-988-21	VARISTOR, CHIP (1608)			
		< SURGE ABSORBER >			
VR1	1-805-043-11	ABSORBER, CHIP SURGE			

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1	1-814-302-11	QUARTZ CRYSTAL UNIT (4MHz)	
X501	1-814-207-21	VIBRATOR, CERAMIC (7.92MHz)	
X502	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)	

****

SENSOR BOARD
****

When SENSOR board is defective, exchange the MECHANICAL BLOCK ASSY (P).

****

A-1836-527-A SERVO BOARD, COMPLETE
****

When SERVO board is defective, exchange the complete mounted board.

****

SUB BOARD
****

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN201	1-818-142-11	SOCKET, CONNECTOR 20P			
		< LED >			
LED201	6-502-193-11	LED SML-D12V8WT86TN (⏏)			
LED202	6-502-193-11	LED SML-D12V8WT86TN (DISC SLOT INDICATOR)			
		< RESISTOR >			
R205	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R206	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
		< SWITCH >			
S201	1-786-653-21	SWITCH, TACTILE (⏏)			

****

MISCELLANEOUS
****

Ref. No.	Part No.	Description	Remark
3	1-834-627-11	CABLE, FLEXIBLE FLAT (23 CORE)	
10	1-839-377-11	CONNECTION CORD FOR AUTOMOBILE (POWER)	
11	1-833-835-11	CONNECTION CORD FOR AUTOMOBILE (SUB OUT (MONO))	
54	1-780-563-11	CONDUCTIVE BOARD, CONNECTION	
58	A-1839-937-A	PANEL COMPLETE ASSY, FRONT	
101	A-1795-758-A	MECHANICAL BLOCK ASSY (P)	
⚠ 102	A-1284-705-A	DAXEV08	
⚠ 103	X-2149-672-1	OPTICAL PICK-UP (DAX-25A) (for SERVICE)	
109	1-838-286-11	CABLE, FLEXIBLE FLAT (13 CORE)	
CN971	1-842-336-11	USB CONNECTOR (USB symbol)	
FU301	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
J901	1-842-936-11	JACK (SMALL TYPE) (DIA. 3.5) (AUX)	
LCD901	1-811-223-11	DISPLAY PANEL, LIQUID CRYSTAL	
RE901	1-487-023-22	ROTARY ENCODER (PUSH ENTER/SELECT (VOLUME))	

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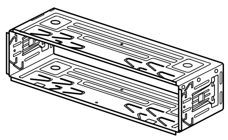
Ref. No.	Part No.	Description	Remark
		ACCESSORIES ************	
	1-479-077-17	REMOTE COMMANDER (RM-X151) (Card remote commander) (Including BATTERY CASE LID)	
	2-548-729-01	LID, BATTERY CASE (for RM-X151) (Included in REMOTE COMMANDER)	
	3-264-798-01	CAP (1 piece) (for SUBOUT (MONO))	
	4-294-067-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH)	
	4-294-070-11	MANUAL, INSTRUCTION INSTALL (ENGLISH, SPANISH)	

****

PARTS FOR INSTALLATION AND CONNECTIONS
****

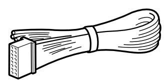
Ref. No.	Part No.	Description	Remark
501	X-2548-178-1	FRAME ASSY, FITTING	
502	1-839-377-11	CONNECTION CORD FOR AUTOMOBILE (POWER)	
503	4-276-003-01	KEY (FRAME) (1 piece)	
504	4-168-810-02	COLLAR	
505	3-934-325-01	SCREW, +K (5X8) TAPPING (1 piece)	

501



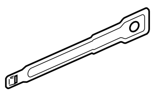
FITTING FRAME ASSY
× 1

502



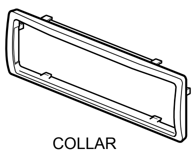
POWER CORD
× 1

503



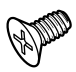
KEY (FRAME)
× 2

504



COLLAR
× 1

505



+K5 × 8
× 4

REVISION HISTORY

Checking the version allows you to jump to the revised page.
Also, clicking the version at the top of the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2011.07	New